

DISCOURSE CONDITIONS AND KOREAN ANAPHORA

By

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KEYS TO ABBREVIATIONS

TO: Topic Marker
SU: Subject Marker
DO: Direct Object
IO: Indirect Object
GE: Genitive
CO: Commitative
NOM:Nominalizer
ADV:Adverbializer
RL: Relative Clause Marker
SP: Special Particle

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DISCOURSE CONDITIONS AND THE KOREAN ANAPHORA

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The anaphoric system of Korean is discussed as an instance of competing hypotheses which separately involve the standard linguistic components--syntax, semantics, and pragmatics--in each of which various factors for the choice of one anaphor over another are examined. Syntactic and semantic conditions on the occurrence of anaphora are examined within the sentence, while conditioning factors in discourse structure, style, cognitive factors, and semantic and pragmatic coherence are investigated beyond the sentence boundary.

Within sentence boundaries a full NP may anaphorically corefer with another full NP in an antecedent position freely. It is the most general anaphoric form and may refer to both human and nonhuman and both animate and inanimate referents, encode generic and random referents, and corefer with quantified NPs. Kusalam is not usually found to corefer

within the sentence boundary. When it does, it refers to human referents only. Ku cannot corefer with the c-commanding subject of its minimal phrase. It refers to human referents only, unless the referent is personified. Caki must be coreferential with an NP contained in a phrase which is higher than or equal to the phrase that contains the reflexive pronoun in the suggested hierarchy. It refers to human and nonhuman animate referents, and corefers with an indefinite antecedent. The zero-anaphor must not be allowed in an argument NP position. It refers to any referent as full NP does in terms of human and animate features, and encodes generic and random referents.

The more explicit an anaphoric form is, the better chance it stands to occur in peak sentences. The smaller the interference between two mentions of anaphora is, the less explicit anaphoric form is used. Inexplicit anaphoric forms are used for the participant with whom the speaker empathizes. Where topic continuity is concerned, zero-anaphor tends to occur if there is no semantic break; ku is used when a topic continues but there is some semantic break; kusalam is used when a topic switches; and a full NP is used to introduce a new referent or reintroduce an old one into a discourse. In addition, specific anaphoric forms are affected by other factors. Ku is restricted to written discourse and neutral style. Caki is specifically used for speaker's empathy with a participant.

CHAPTER ONE INTRODUCTION

The anaphoric systems of different languages have always been a topic of interest to linguists, despite any diversity in their approaches. Two of the things that make anaphora particularly fascinating are that rules governing the interpretation of anaphoric elements are hard to formulate and that the interpretation itself largely relies on context. However, there are still anaphoric occurrences which are conditioned by syntax. Hence, it is believed that anaphora provides not only a clear instance of the interaction of syntactic properties, but also shows the interaction between various discourse and semantic considerations. Whatever the theoretical orientation is, the task of linguistics is generally assumed to be accounting for relationships between linguistic forms and their functions. If so, the study of anaphora could be viewed as a characteristic instance of competing hypotheses which involves interaction between the standard linguistic components--syntax, semantics, and pragmatics.

What this means is simply that a sentence grammar will not work for, or cannot explain, linguistic forms and their functions, unless it is part of a discourse grammar. Some

factors that must be considered for a full understanding of a sentence may not be available within the sentence itself. Rather, they have to be sought within the context of the discourse.

1.1. Anaphora Defined

Numerous authors provide their own definitions of anaphora or at least attempt to characterize what anaphora is. Consequently, there exist many slightly different but similar versions of definitions.

Specifically, Lust (1986:9) gives a definition for intrasentential anaphora, as follows: "... the relation between a 'proform' (called an 'anaphor') and another term (called an 'antecedent'), wherein the interpretation of the anaphor is in some way determined by the interpretation of the antecedent." Lust restricts his attention to intrasentential relations; hence the definition does not include intersentential anaphora, although it might apply to the latter.

Wasow (1986:108) seems to provide a more general definition of anaphora: "Loosely, then, the study of anaphora deals with pronouns, other 'proforms' (e.g., do so), and ellipsis. These constructions share a number of properties, the most obvious being that they derive their interpretations in a context from their association with other elements in the context."

Since a full noun can also be an anaphor, a general definition of anaphora might be formulated as follows: Anaphora is the relation between a "proform (including null form)" or a full noun and its coreferential (nominal) element in a discourse. The former is called the anaphor and the latter is called the antecedent.

1.2. Basic Assumption and Purpose of the Study

The anaphora in Korean have generally been treated syntactically in terms of their distribution within the sentence, as in the framework of Transformational Grammar (e.g., Yang 1972). Some studies recognize the limitations of the analysis of anaphora within the sentence, and thus adapt an interpretive semantic theory (e.g. Kim 1976). These approaches, which attempt to account for the occurrence of pronominal anaphora via syntactic and/or semantic criteria, are inadequate, because the choice between different forms of anaphora has been found to be mainly governed by the structure of discourse. Many occurrences of pronoun and zero-anaphora without antecedent still remain unexplained within the sentence boundary.

More recent studies of Korean recognize the need of discourse analysis for anaphora. However, they have not produced fully satisfactory results, because they do not examine the complete set of anaphora. They omit such anaphoric types as the repeated single noun, the reflexive

caki¹, and the "demonstrative + N" form. Moreover, they do not account for discourse factors.

This study goes beyond the sentence level to examine the actual occurrences of anaphora in order to achieve a better understanding of the language in use. It identifies the various syntactic, semantic, and discourse factors which interact to affect the choice of anaphora by native speakers of Korean.

In this study, it is assumed that there are language-specific conditions as well as universal conditions in discourse for the choice of anaphora. It is further assumed that universal factors interact with language-specific factors to provide specific constraints for the choice of anaphors in Korean.

In particular, such factors as the theme of text, script role, ambiguity of reference, point of view, and discourse boundaries are considered in this study. In addition, it is necessary to distinguish between written and spoken narrative on the one hand, and between honorific and neutral narrative on the other.

In fact, the conditions/factors interact with each other in such a way that the speaker has a range of choices to make with regard to anaphoric forms. This, however, does not nullify linguistic generalizations, because individual variations in the choice of anaphora must stay within a certain range, just like other discourse matters.

The data utilized in this study include both written and spoken narrative discourse. The written narratives are selected from newspapers, magazines, and novels. The spoken narratives are taken from recordings of natural conversation.

This study contributes to the following three areas:

1. a relatively comprehensive description of the factors affecting native Korean speakers' choice of anaphora in discourse;
2. a better understanding of the discourse functions of the whole set of anaphors in Korean both for written and spoken narrative discourse; and
3. an evocation of the need for the study of interactions between syntax, semantics, and discourse.

1.3.A Brief Introduction of Third Person Anaphoric Forms in Korean

To get a better understanding of the conditions on anaphora, it is necessary to examine the whole set of anaphors. Therefore, at least five anaphoric forms should be considered for third person reference in Korean. These are anaphoric single noun, demonstrative + Noun, the pronoun ku, the reflexive caki, and the zero-anaphora. A brief introduction and definitions of these anaphoric forms are given below with illustrative examples in (1) ~ (3).

Examples (1) and (2) are written discourse, while (3) is a segment from a natural conversation.

- (1) Kimuyhyenssi₁-nun swuphil ssununilul caki₂
 insayng-ey tasi epnun polamulo sayngkakhako σ_3 σ_4
 honsinuy cenglyekul kekley kiwulyewatko, tto
 keki-eyse ku₅-nun mwusanguy huyyelkwa anwilul
 etul swu issetta.

'Mr. Kimuyhyen₁ thought that writing essays is one of the best rewarding part in his₂ life, (he₃) devoted (his₄) whole passion to it, and (he₅) received continuous happiness from it.'

- (2) Yeswu₁-kkeyse nacalo₂-lul mwutemeyse pwulenaye
 σ_3 cwukun catul kawuntese salisil ttay ku caliey
 kachi itten salamtul₄-i motwu ku ilul
 cungenhayetta. Kwuncwung₅-i yeswu₆-lul macule
 nakanket to yeswu₇-kkeyse ilekhey kicekul poye
 cwusiettanun malul σ_8 tuletke ttaymwunita.

'The people₄ who had been with Jesus when he₁ called Lazarus₂ out of the grave and raised him₃ from death had reported what had happened. That was why the crowd₅ met him₆--because (they₈) heard that he₇ had performed this miracle.'

- (3) A: ilcene yengsa₁-ka yeki tanyekatetci?

B: Ku salam₂ kkoyna kemanhatelako. σ_3 Caki₄-
 ka cengpu taypyeninccum toynuncwul altelako.
 Wuli-ka yengsakwan cikwentul
 pwulchincelhatako pwulpyengul haytteni σ_6
 kuken cikwentul₇ welkupi cakaselay.

C: Ku yangpan₈-to pyel towum an
toykeytkwuman...

A': A consul₁ was here the other day.'

B': He₂ was quite bossy. (He₃) thought he₄ is the spokesman for the government. When we complained about the unfriendliness of the officers₅ in Consulate, (he₆) answered that is because of the low wage of them₇.'

C': He₈ could not be a big help.

Zero is used very commonly for anaphoric expressions in Korean as well as in Chinese and in Japanese. Although zero-anaphor is morphologically unrealized, its anaphoric function is recognizable syntactically, semantically, and pragmatically, just as those of other anaphoric forms are. Gundel (1980) cites the high frequency of zero anaphor in topic-prominent languages like Japanese and Chinese as a typological feature which distinguishes them from its low frequency in subject-prominent languages like English. Korean is topic-prominent, like Japanese and Chinese. The zero anaphor can occur in most (=all) syntactic slots, as the above examples show.

The pronoun ku is more or less equivalent to English he in terms of its form and function.² Conversely, however, the pronoun in Korean seems to be restricted to written discourse. Thus, in example (3), a text (Halliday's term) from an informal conversation, no pronoun occurs. Instead, repeated NPs, such as ku salam 'that man' and cikwentul 'officers,'

are utilized. Contrast this with the written texts in (1) and (2).

It is said that ku was established recently (in the twentieth century) as the third person pronoun through the influence of Indo-European languages, particularly of English. Historically, the three distinct demonstratives, i 'this,' ce 'that,' and ku 'something there,' all have pronominal functions. The basic function is deictic, but can be extended to be anaphoric. The form i refers to an object near the speaker, ce near the hearer, and ku no closer to the speaker than the hearer. Here the distance from the speaker and the hearer is not only spatial but also mental, which largely depends on the judgement of the speaker. Ku seems to have been more commonly used for anaphoric reference than for the deictic function, while i and ce have been used as deictic demonstratives, and therefore ku should or could be a strongest candidate for the pronoun.³

The reflexive caki in Korean differs from the reflexive pronoun in English and many other languages. In English, the reflexive pronoun is syntactically different from other pronouns, as it refers to an antecedent within the clause boundary only. However, caki is not as strictly different in syntactic terms from the pronoun ku as the English reflexive is from its corresponding non-reflexive. They are commonly interchangeable with each other with slight meaning differences which would prove to be crucial in a discourse

grammar. Furthermore, caki can be coreferential with an antecedent across sentence boundaries, as in (3), as well as within sentence boundary as in (1). Thus, caki should be considered an anaphor for both syntactic and discourse purposes. Details of the differences between ku and caki are discussed in later chapters.

Included in the category of demonstrative + noun, a noun is often repeated with a preceding demonstrative in spoken and sometimes in written Korean, as in Japanese narratives. It seems that such a demonstrative + Noun form is intermediate between the full noun and the pronoun, because it is more semantically loaded, than the pronoun and must always be definite, whereas a single noun may or may not be definite. Thus the demonstrative + N can be called a definite NP. This potentially anaphoric form has been ignored in the analyses of Korean anaphora, although it is a clear and very common type of anaphor. Sometimes, as in (3), it is as common as the zero-anaphora. Such disregard is probably because it is not easy to sort out the personal nouns to be subsumed under a single category. Actually there are many equivalents of this form, demonstrative + N, such as ku salam 'that person,' ku ai 'that child,' ku ca 'that man (impolite),' ku yeca 'that woman,' etc. We can make as many equivalent forms as we want.

Since the task of linguistics is to account for possible linguistic forms and their functions, the demonstrative + Noun

form should be included in the analysis of third person anaphora in Korean. Since it is virtually impossible to analyze all possible forms, we must take a most frequent form as a representative. In this regard, ku salam 'that person' is an appropriate choice, because it is most often found in natural conversations and in written texts. Besides it refers to any third person, while the other forms, such as "that child" or "that woman" are restricted to nouns for only children and women, respectively.

The anaphoric single noun also occurs much more often in Korean anaphors than in English. It is very common to repeat a noun without any articles or demonstratives for anaphoric purposes as in (2) and (3).⁴ In (2) and (3), unmarked nouns such as Yeswu and cikwentul are repeated anaphorically. Often proper names, kinship terms, such as father, mother, and grandfather, or titles, such as teacher, etc., are repeated anaphorically without any specifiers. The definiteness or indefiniteness of a noun is not marked morphologically in Korean. It is determined solely by context. Although there is individual variation, anaphoric single nouns and demonstrative + nouns seem to be more common than pronouns in Korean narratives, especially in speech.⁵

1.4. Outline of This Study

We have just introduced the various anaphoric forms in Korean. Such morphological variations in anaphoric forms are

not the result of random choice. Some syntactic or discourse structures may prohibit the choice of certain anaphoric forms in a specific context. Some semantic properties of grammatical elements may prefer the use of one form to others. Pragmatic factors and discourse structure may also require the speaker to choose a specific anaphoric type. All this reveals that the only way to determine the roles of syntax, semantics, and discourse in the choice of one anaphor over another is through a careful analysis of each of these separately.

The body of this dissertation is organized as follows. Chapter Two reviews previous studies on pronoun and anaphora in Korean as well as in other languages. Chapters Three and Four describe syntactic and semantic conditions on the occurrence of anaphora within the sentence in Korean. Chapters Five and Six present various discourse conditions on anaphora. Finally, Chapter Seven presents some concluding remarks which evaluate the present work and provide outlooks on further research.

Notes

1. The romanization of Korean follows the Yale system, although the author does not completely agree with it. Since so many problems are found in the several romanization systems of Korean in popular use, further research is needed for a fully satisfactory standardization.

2. Some Korean speakers make use of the third person feminine pronoun, kunye. However, the pronoun ku and kunye are not often found in spoken narratives, while they are more often found in written narratives. Other writers use only ku for

both male and female third person reference. Since the status of the third person feminine pronoun is not clearly established yet, ku is regarded as the representative form for the third person pronoun in the present study.

3. For the anaphoric and deictic functions of the three demonstratives, see Kang (1980) and Chang (1980).

4. Since Korean lacks articles, definite NPs may be marked by a demonstrative and indefinite NPs by the numeral hana 'one.' Yet a considerable number of unmarked NPs are found in discourse. The definiteness or indefiniteness of the unmarked NPs are deduced from context. Dr. Chauncey Chu pointed out in a personal conversation that syntactic position may have something to do with definite/indefinite interpretation of unmarked nouns. That is, a topic/subject is more likely to be definite than a non-topic/object.

5. Ann Jefferies suggested in a personal conversation that such use of repeated unmarked nouns parallels the use of proper nouns in English. It seems that single nouns can work both as an ordinary noun and a proper noun in Korean. However, more study is needed in this matter.

CHAPTER TWO LITERATURE REVIEW

The notion of anaphora has been discussed for a long time in the history of linguistics. For classical grammarians, the question of anaphora is how pronouns (i.e., anaphora, deixis, or demonstratives), despite their semantic attenuation, can refer to specific objects.¹

In the 1930s, Bloomfield (1933) first proposed the fundamental notion of substitution for pronominal reference. Later, transformationalists elaborated on the notion of substitution and found the conditions under which anaphoric relations between different NPs and pronouns in the same sentence are possible.

More recently, the transformational approach has provided a closer look at anaphora. Yet it has been found to be unsatisfactory to some extent, because it does not give any satisfactory explication for the notion of substitution. In fact, the conditions on pronominal coreference may be of a very different nature than transformationalists have anticipated. As a result, there are still many anomalies which should not be dismissed as minor language phenomena. For example, any of the following anaphoric relations both

in English and Korean are not explicable in terms of substitution or in the framework of TG.

- (1) Everybody told him (that) he was out of his mind.

(The Tales of Uncle Remus, p.32)

- (2) The neighbors could hear him cussing and carrying on so bad that they almost called the police.

(The Tales of Uncle Remus, p.35)

- (3) *ø* phothu-uy kkulnun mwul-ul pwutko *ø*
 pot GE boiling waterDO pour

selthang-ul thanta.
 sugar DO mix

'(He) poured boiling water in the coffee pot,
 (he) mixed sugar (with the coffee).'

(Sintonga, p.398)

- (4) Ku-uy swuphil-un ku-ka caswulhanpawa katchi
 he GE essay GE he SU selfwritten likewise

ku-uy maum-uy cahwasangita.
 he GE mind GE portrait

'His essays are, as he has written (by
 himself), a portrait of his mind.'

(Hemwulepnuniwaury Tayhwa, p. 197)

In (1) and (4), both the English and Korean sentences involve three pronouns. Since no possible antecedents are found in such cases, it is impossible to describe the anaphoric relations in terms of substitution. Although one might argue that one of the pronouns plays the role of antecedent, the coreferentiality of all the three pronouns is still

ambiguous. That is, at least one of the pronouns can refer to someone beyond the sentence.

In (2), there is only one occurrence of the pronoun him, and no possible antecedent for it. Though a third person NP, the police, is found at the end of the sentence, English speakers would not interpret the pronoun as coreferential with the police because of the meaning of the sentence. It is certain that a pronoun only without an antecedent in a sentence can not be described within the TG framework.

Example (3) provides a typical Korean sentence where anaphoric agents are all omitted. Such an example is not only an anomaly but also an unacceptable sentence in the TG framework. However, ellipsis of nominals is very frequent. Thus, none of the above examples could be regarded as an exceptional or very rare case.

Likewise, the structuralist theories of pronouns fare no better. They do not attempt to account for the occurrences of pronouns without an antecedent or postcedent in the same sentence. Especially in a language like Korean, where such phenomena occur quite frequently, structuralist theories can do very little. Some writers, such as Bolinger (1979), conclude that there can be no structurally stable restrictions on pronoun-antecedent pairs, and they claim that the issue is largely a matter of discourse conditions. Furthermore, some cognitive studies of anaphora have investigated pronominal anaphora in real speech situations

and found cognitive explanations for pronominal occurrence.² Clancy (1980) is an example. At the same time, a number of psycholinguists have conducted quantitative experiments to see how human short-term memory works with regard to anaphora (e.g., Clark and Sengul, 1979). In this chapter, we review some of the major works from structuralism to recent discursial approaches in the linguistic tradition of Korean and some other languages.

2.1.Literature on Anaphora in General

2.1.1.Within The Sentence Boundary

There are two fundamental issues in the structural approach: pronoun reference, i.e., an account of substitution, and the exact conditions under which a certain NP can be replaced by a pronoun. The second issue may be represented in the form of two alternatives: whether conditions constrain the application of transformations to derive surface pronouns (Ross 1967 and Langacker 1969), or whether they provide interpretations at the surface structure (Reinhart 1976).

Before we consider the transformational-generative approaches to this issue, we will first look at Bloomfield's (1933) structuralist approach. Bloomfield sees pronominal reference on the more literal basis of the term 'pronoun' and

relates it to substitution. That is, a pronoun refers to its referent via a form for which it is a substitute.

A substitute is a linguistic form or grammatical feature which, under certain conventional circumstances, replaces any one of a class of linguistic forms. Thus, in English, the substitute I replaces any singular number substantive expression, provided that this substantive expression denotes the speaker of the utterance in which the substitute is used. (1933:247)

So Bloomfield focuses on the issue of what pronouns replace.

Although Bloomfield notices the relationship between "a substitute" and "a substituted form," his followers, "the Neo-Bloomfieldians," overlooked the relationship and investigated only the classification and distribution of pronouns (e.g., Hill, 1957: 145-152).

Despite its disagreements with the Bloomfieldian tradition, transformational-generative grammar likewise emphasizes the anaphoric "relations" between a pronoun and its antecedent. Thus, pronominal reference is still explained in terms of "substitute." The difference between Bloomfield and transformational-generative grammar is that the latter treats the substitution as a process in terms of transformational rules.

Beginning with Lees and Klima (1963), the anaphoric relation between a pronoun and its antecedent was accounted for by transformational rules of "pronominalization": the replacement of a lexical NP in the deep structure by an

anaphoric pronoun in the surface structure. They formulated two rules: pronominalization and reflexivization. Both rules operate under basically the same principle: when an underlying structure contains two identical NPs, pronominalize/reflexivize the second of them and produce a personal pronoun or a reflexive pronoun. The difference is that reflexivization only applies within the simple sentence, while pronominalization applies across simple sentences, though within the same complex sentence.

However, there could be a problem when the identical NPs are two different identities with the same name. For instance, in the following sentences, a form like (3) will be derived from (1) by reflexivization, while derivation from (2) is impossible.

- (1) John_i washes John_i.
- (2) John_i washes John_j.
- (3) John washes himself.

To restrict these cases, referential indices are assigned on lexical items within Chomsky's Standard Theory (1965), just as subcategorization features are assigned.

The indexing of NPs, however, does not solve the problem, because it is not certain under what circumstances NPs are indexed. Another solution suggested by some generative grammarians consists of formulating a set of semantic

interpretation rules which apply to surface structures to determine the possible referent of a pronoun, and thus abandons the idea of referential indexing. Pronouns then are no longer surface substitutes for NPs but are base-generated.

Langacker (1969) may be the first among the most fruitful studies on anaphora to formulate a general condition on anaphoric and coreferential relations. It is known as the precede-command constraint (or primacy constraint), which allows for pronouns to be preceded or commanded by an antecedent NP. An NP1 commands another NP2 if every S-node dominating NP1 also dominates NP2.

Various counterexamples to the constraint, however, have been observed by quite a number of linguists. Lakoff (1968), for instance, argues that some sort of prosodic elements, such as pause or the length of a clause, would allow many exceptions to the constraint and would be a significant factor in affecting anaphoric relations. Furthermore, Akmajian and Jackendoff (1970) observe that stress also affects some occurrences of pronouns, which constitute counterexamples to Langacker's constraint.

Reinhart (1976) proposes a modification of the constraint, namely the constituent-command (c-command) constraint, and as a result abandons the precedence relation. This constraint does not allow for a pronoun to c-command its antecedent NP. Two NPs cannot be coreferential if one is in the syntactic domain (c-command domain) of the other.

Although Reinhart (1976) is not free of exceptions,³ it is regarded as a workable constraint for anaphora. According to Wasow (1986), trace theory makes it possible to deduce the "insertion prohibition" of Chomsky (1965:146) from the c-command constraint. Furthermore, the c-command relation has been invoked in the formulation of other syntactic conditions and rules. One of them is the definition of 'government' (Chomsky 1981).

Chomsky's (1981) Government and Binding Theory (GB henceforth) is formulated in terms of Reinhart's (1976) notion of c-command as well. He gives the definition of binding as "a is bound by b if and only if a and b are coindexed and b c-commands a" (Chomsky 1981, Ch.3). In GB three nominal categories are distinguished: anaphors include reflexives and reciprocals, pronouns include lexical pronouns, e.g., he and she, and r-expressions consist of names or variables, as in the empty category. The binding principle of these categories are (A) an anaphor is bound in its governing category, (B) a pronominal is free in its governing category, and (C) an r-expression is free. Thus, in GB, anaphora are treated not as direct relations between antecedents and anaphors, but as relations between them through binding. More importantly, binding relations still do not go beyond the sentence boundary.

Other difficulties with the phenomenon of anaphora in the transformational generative tradition are the problem of bound

variables and the distinction of deep and surface anaphora. The term "bound variables" is introduced on the basis of Quine's (1960) suggestion that natural language quantifier phrases should be treated like the quantifiers in classical predicate calculus.⁴ If a pronoun belongs to the set of bound variable pronouns, it is preceded by a quantifier such as no, some, or any, resulting in surface forms like nobody or somebody. Later, it is suggested that bound variable anaphors are not restricted to quantified antecedents, but they can also have definite antecedents.⁵ Reinhart (1976, 1983) argues quite convincingly that some definite NP anaphora are ambiguous between the bound variable and the pragmatic interpretations, and bound anaphora with definite NPs are possible under the same syntactic conditions, permitting quantified NP anaphora, namely when the antecedent c-commands the pronoun. Otherwise, a definite NP anaphor has a coreferential relation with its antecedent.

In addition, Hankamer and Sag (1976) distinguish the pragmatically controlled anaphora from the structurally controlled. In their terms, the former is labeled "deep anaphora" and the latter "surface anaphora." The point is that surface anaphors are constrained by the structural properties of the antecedent, while deep anaphora are interpreted by pragmatic control. Despite their insightful distinction between these two categories of anaphora,

Hankamer and Sag's proposal remains speculative in the absence of a detailed analysis of intersentential examples.

So far, we have discussed the mainstream structural, mainly transformational-generative, approaches to anaphora. These analyses have certainly made great contributions to finding the structural conditions on anaphora, but their interpretations of anaphora are not complete without a consideration of the context in which the anaphoric relation is developed. This is so simply because anaphoricity is not merely a matter of structure but also a matter of discourse pragmatics and of language use.

Reinhart (1983, 1986) attempts to state a more comprehensive set of such conditions. Arguing that the intended coreference (principle C in GB) need not belong to the grammar, she suggests the following approximation of pragmatic strategies to govern decisions about intended coreference:

- a. Speaker's Strategy: when a syntactic structure you are using allows bound-anaphora interpretation, then use it if you intend your expression to corefer, unless you have some reasons to avoid bound-anaphora.
- b. Hearer's Strategy: if the speaker avoids the bound anaphora options provided by the structure he is using, then unless he has reasons to avoid bound-anaphora, he did not intend his expression to corefer. (Reinhart 1986:143)

Unfortunately, however, Reinhart leaves a lot of things unexplained in the pragmatic part, giving only intrasentential examples and discussions.

2.1.2. Beyond The Sentence Boundary

The validity of the structural approaches to anaphora was initially questioned by Bolinger (1977) and McCawley (1978). In the years following them, many actual transformationalists raised further questions concerning the structural constraints and attempted to find discoursal factors for anaphora (e.g., Li and Thompson 1979, Hinds 1978 and 1979, among others). Meanwhile psycholinguists investigated narrative discourses and discovered cognitive reasons for the selection of an anaphor, though some of them are more concerned with the problem of children's acquisition of anaphora.

Bolinger's (1977) main idea is that "pronominalization" should be regarded as a process of pragmatic choice between a nominal with a richer semantic content and a nominal with a leaner one, rather than as a sort of mechanical process caused by the presence of a noun at this or that location.

Linguists who examined data in languages other than English found many discourse factors that influence the appearance of specific anaphoric forms. Li and Thompson's (1979) semantico-discoursal approach to the uses of the third person anaphor in Chinese written discourse is followed by

other researches (Chen 1984, Li 1985) with the same orientation. They all try to discover the conditions under which the speaker chooses one form of anaphora over others and to formulate the governing principles for the choices. This series of investigations into Chinese anaphora represent a positive development toward using a broader scope of data as well as a shift in orientation.

Li and Thompson (1979) examine the uses of the third person pronoun and zero anaphora in written Chinese discourse. They suggest that the governing condition for the choice of anaphora is semantic "conjoinability" between clauses. For them, the interpretation of the referent for the zero-anaphora or the third person pronoun is inferred on the basis of pragmatic knowledge. Furthermore, although the occurrence of pronouns is predictable by the discursal principle of conjoinability, this principle contains variables dependent on the speaker's perception of the pragmatic situation.

Although they recognize the crucial nature of discourse considerations, Li and Thompson fail to find enough relevant discourse factors. "Conjoinability," their only discourse condition on anaphora choice, is not clearly definable and not fully comprehensible in their terms. Moreover, their exclusion of topic chains from the explanatory factors for the occurrence of zero-anaphora in Chinese seems to be less than convincing, because topic chains have been known to be

relevant to anaphora choice (cf. Givon 1982 and Hwang 1983). It is their strong belief in discourse-semantics conditions to the exclusion of others that leads them to denying the topic chain, one of the most agreed-upon discourse structural conditions.

Chen (1984) essentially follows Li and Thompson's argument and broadens the scope of semantic conditions to include more discourse factors. Accordingly, Chen is just an extension of Li and Thompson's discourse-semantics condition. He also fails to notice the importance of discourse structure in conditioning the choice of anaphoric forms.

Chen argues that "the Predictability Condition" and "the Negligibility Condition" are the main determinants in the selection of an anaphora type. To support one of his conditions he utilizes Keenan and Comrie's (1977) notion of accessibility hierarchy. However, the value of the hierarchy is highly debatable, at least in anaphora. For instance, both Li and Thompson (1979) and Li (1985) clearly show that some obligatory syntactic conditions on anaphora (pivotal object or the object of coverb) supersede the hierarchy.

Li (1985) tries to bring up other possible factors which condition the choice of anaphora in syntactic, semantic, and pragmatic environments. It identifies major and minor opening boundaries for discourse blocks and paragraphs, and it shows that the appearance of nominal and pronominal anaphora is due

to the occurrence of these boundaries. Pronouns also occur as pivotal objects and objects of coverbs (syntax), and nouns also are used to avoid ambiguity and mark emphasis (the speaker's semantic or pragmatic choice). Otherwise, the zero anaphor occurs. All of them show that what Li and Thompson and Chen have discovered are not direct conditioning factors for the choice of anaphora, but rather, are contributing factors to the determination of discourse boundaries. The choice of one over others usually reveals the author's style and attitude to a large extent.

Hinds (1977, 1978, 1979) is another who investigated pronominal choice in terms of discourse structure. He examines a number of English and Japanese texts which maintain a single thematic organization, and shows that pronominalization is controlled by paragraph structure, assuming that paragraph may be defined minimally in semantic terms. The basic principle is that pronominalization is possible if (a) the referent is properly registered in the discourse registry, and (b) there will be no vagueness or ambiguity created because of multiple antecedents. Following the principle, a full noun is used to indicate semantically prominent information, while a pronoun is used to indicate semantically less prominent information. He also noted that full nouns in Japanese, as in English, occur in the peak sentences of a segment and that ellipsis in Japanese, just as pronouns in English, occurs in non-peak sentences.

In addition, Linde's (1979) study of English pronouns contains an interesting finding of "the focus of attention" as a controlling condition on the choice of it and that. She claims that usually it is coreferential with an object inside the focus of attention, while that is coreferential with an object outside the focus of attention. However, such a different use of it and that in a discourse seems to be in large part due to the inherent differences between anaphoric and deictic pronouns.

The complicated issue of anaphora leads some linguists to adopt a new line of thought. More psycholinguists than ever before are studying children's acquisition of anaphora (Lust 1986). Most of them assume that the psycholinguistic study of children's language acquisition should be done on the basis of a widely accepted linguistic theory. Therefore, in most cases, the theoretical underpinning of transformational generative grammar, especially GB, is adopted in the search for empirical consequences. As a result, such psycholinguistic studies have not overcome the limitations of the transformational generative tradition mentioned before. Since the present study is not concerned with language acquisition, we will not go into detail here.

There are some interesting cognitive discourse analyses of anaphor outside the TG tradition. Clark & Sengul (1979) and Clancy (1980) are two of them.

Clark and Sengul (1979) show that it is easier to identify the referent of a pronoun when the referent is mentioned in the immediately preceding sentence (or clause). With intervening sentences, it becomes increasingly more difficult to determine the referent as the following sequence shows (Clark & Sengul 1979:35): (8) Yesterday I met a woman who had written a book on viruses. She had studied them for years and years. It was selling very well. Because the referent of it is mentioned two sentences previously, more time must be devoted to searching in short-term memory for the referent than if the second and third sentences were reversed.

Meanwhile, Clancy (1980) points out that a speaker's choice of referential form depends on his awareness of the cognitive constraints on the listener's ability to decipher reference, the need to construct and mark discourse units of different sizes, and the problems of clarity and viewpoint in recounting complex material. Using evidence from Japanese and English spoken narratives, Clancy further suggests that the conditions she illustrates are universal, while, for particular languages, there are a number of language-specific conditions, which can be considered modified versions of these universal conditions. She also notes with regard to language-specific conditions that "from a psychological point of view, perhaps the most basic tasks include investigations of what in human cognition places the constraints that

apparently exist on referential choices, and of how these constraints will interact with language specific factors to produce the 'rules' of a referential system (1980:197)."

So far we have selectively discussed literature on anaphora in languages other than Korean. In the following section, we look into literature on Korean anaphora.

2.2.Literature on Korean Anaphora

Pronouns and anaphora have not received as much attention in Korean as in English. It is probably because many Korean linguists feel that the pronominal system and its occurrence are quite different from those of English. For instance, Korean did not utilize a third person pronoun until recently.

Nevertheless, some Korean linguists have started to examine pronoun and anaphora under the influence of the TG tradition while others tend to reject the TG concept of pronominalization, arguing on the basis of the differences between Korean and English anaphoric systems and noting the discourse-oriented nature of anaphora.

2.2.1.Within The Sentence Boundary

For early traditional grammarians, classification of pronouns is the main task. Choi (1929) recognizes the grammatical function of pronouns as substitution. He defines pronouns as forms that are used as a substitute for nouns and things, and they have no substance but forms. It is seen

from his definition that he merely acknowledges pronouns' semantic leanness and their structural nature.

In the late sixties and early seventies a number of linguists of Korean origin, who were studying in U.S. universities under the TG tradition, employed "pronominalization" and "reflexivization" rules and constraints to explain their Korean data. Among them, Kim (1976) was the first who dealt exclusively with the anaphoric relations of Korean pronouns and the zero-anaphor. Her description is based on the interpretive theory. She claims that the base rules generate Korean anaphoric pro-forms in all NP positions and thus transformations are rendered superfluous. However, most of her Korean examples are extremely awkward and proved to violate native speakers' intuition.⁶ Moreover, her description of Korean anaphora as if they were something like English anaphora is suspect.

An additional problem is that she uses such terms as anaphor, reference, coreference, more/less anaphoric NP, etc., in ways different from the usual usages without giving clear definitions for them. For instance, she even confuses the notions of anaphor and antecedent. Let us look at one of her statements, which is only one example of the many such mistakes.

"(5) a. Nay-ka John_i-ul ku_i-eykey kewul-ey
I SU DO him to mirror in

poyecwuetta.
showed

'I showed John_i to him_i in the mirror.'

....In the above sentences, a direct object (i.e., John) is the anaphor of the ku-indirect object." (Kim 1976:110; emphasis mine)

Here, Kim regards John as the anaphor, which is actually the antecedent, and ku as "proform." The misuses of the terms such as the above render her study almost incomprehensible. Besides, the Korean sentence, like many other examples in her work, is extremely awkward for native speakers. She misses the point that in Korean, the direct and indirect objects in a simple sentences cannot be coreferential.

Kim (1976) also develops an arbitrary algorithm for formalizing the preference of the proform caki. She assumes that a linkage of 100% value is obtained where an NP asymmetrically commands and immediately precedes its anaphor. That is, "if an NP commands and immediately precedes caki, raise its percentage value to 100%." (p.7) For every possible anaphoric NP, Kim subtracts 10% x the number of clauses between caki' and the antecedent from the 100% value if the NP precedes caki, i.e., $100\% - (10\% \times X)$. She subtracts another 10% from the algorithm when the NP follows caki, i.e., $100\% - (10\% \times X) - 10\%$.

However, the 10% to be subtracted from the algorithm is a totally arbitrary number, as she gives no justification for it. Since she used an arbitrary number, the result does not

make much sense. For instance, she says that the range within 50% to 100% is used to represent preference among readings for sentences which are all judged to be grammatical, and the range within 0% to 50% is used to represent the levels of ungrammaticality. But there are numerous discrepancies between the predictions of her algorithm and judgments of native speakers. The details of these inaccuracies are not relevant to this work. There is therefore no need to examine them minutely here.

Beyond the difficulty with Kim's algorithm, there are several problems with her description. For example, her argument about "precedence" condition, one of Langacker's (1969) primacy constraints, is not valid in Korean. Since Korean is relatively free in word order and many examples of sentence initial pronouns are found, it is hard to tell whether the "precedence" condition for anaphora actually works.

Some time before Kim (1976), Lee (1973:Ch.3) already argues that caki (among the anaphoric forms) is coreferential with the subject or topic NP of any dominating sentence and is limited to the third person human noun, abandoning the precedence condition of Langacker's Primacy constraint. His "Reflexivization" is summarized as follows:

When the subject or topic NP [+Hum, +III] of a sentence is in command with an instance of a following coreferential NP [+Hum, +III], the former reflexivizes the latter. If the topic is not

coreferential with its immediately following subject, only that subject but not the topic can reflexivize a following coreferential NP with which the subject is in command. (pp. 118-119)

As Lee's work was done in the transformational tradition, he views Korean "reflexivization" in terms of transformational relations.

Lee also points out that many examples show the violation of this basic principle because the coreferentiality of an anaphoric form (zero, caki, or ku) with an NP may depend on the verb's semantic features. For instance, the zero-anaphor in a complement clause is often coreferential with the matrix subject when the complement verb has the semantic features of [+v, +Adj, +psych]. These verbs are sulphuta 'sad,' ecilepta 'dizzy,' oylopda 'lonely,' culkepta 'pleasant,' collipta 'drowsy,' mokmaluta 'thirsty,' etc. On the other hand, the zero-anaphor is coreferential with the matrix object, when the complement verb includes the semantic features of [+Adj, +Attrib]. Such verbs include yepputa 'pretty,' khuta 'tall,' cengcikhata 'honest,' etc. In both cases, the matrix verb must be a declarative verb of "saying" such as malhata 'say,' solichita 'shout,' senenhata 'declare,' iyakihata 'talk,' etc. Additional evidence will be brought to bear on this issue in Chapter Four.

In other cases, Lee states, caki in a complement clause is also often coreferential with the matrix subject, especially when the subject is necessarily conscious of the

action represented by the complement verb. Therefore having caki in place of the zero-anaphor has the effect of being coreferential only with the subject. Since Lee's main concern is caki, he pays little attention to ku and zero-anaphora.

A limitation of Lee's analysis is that it cannot handle many normal sentences with an initial caki, such as the following in (4) and (5).

- (4) caki_i-ka ssun chayk-i Young_i-eykey-nun
self SU write book SU IO TO

calangsulewetta.
proud of

'Young was proud of the book which he wrote.'

(The book which he -self- wrote was a pride to Young.)

- (5) Caki_i-lul kyengmyelhaten yenghi_i-nun kyelkwuk
self DO despise TO finally

casalhakomalatta.
committe suicide

'Yenghi, who had despised herself, finally committed suicide.'

In (4), caki is the relative-clause subject and refers to Young, the matrix subject, while in (5) caki is the relative-clause object and refers to Yenghi, the matrix subject. The sentences are perfectly normal to Korean speakers, and these kinds of sentences are easily acceptable without consideration of any previous discourse. Nevertheless, Lee claims that an occurrence of caki introduced in sentence initial position does not meet the

condition and therefore cannot be interpreted as reflexive in a sentence. Although the caki in (4) is more like an emphatic self and may therefore meet Lee's condition, the caki in (5) cannot be anything but a reflexive.

There are additional problems with regard to Lee's condition for reflexivization. Although Lee argues that the reflexive caki is limited to the third person human reference, most Korean native-speaking linguists agree that animate nouns, as well as human nouns, can be an antecedent of caki (Lee 1973, Kim 1981). The following sentence serves as a good example.

- (6) Kongcwung-ul nanun ce say_i-to etuwecimyen
 space DO fly that bird even darken

caki_i-cip-ul catnunta.
 self home DO look for

'Even that bird flying in space goes for
 its(self's) home (nest) when it is getting
 dark.'

Another problem in Lee's argument concerns the notion of topic as the antecedent of caki. Since "topic" is a discourse concept, using it in a sentence-bounded analysis necessarily leads to inconsistency. A majority of native Korean linguists (e.g., Lee and Lim 1983 and Kim 1981) do not agree with Lee's topic antecedent for caki. They claim that caki only takes the subject antecedent. They, however, walk into the same trap. In arguing against Lee's claim, their evidence comes

only from isolated sentences, where it is hard to pinpoint in what ways topic and subject differ. While it is true that Korean is known to have distinct particles to mark topic (nun/un) and subject (ka/i), their actual usage is not a simple dichotomy. Sometimes ka/i can go with a topic, and other times nun/un can mark a simple contrastive meaning.

Therefore, such complications can only be studied through observations of the actual workings of discourse. At this point, what can be said is that caki tends to refer to the subject within the sentence boundary, while it can refer to the topic in discourse. More discussion is provided in later chapters.

More recently, Yang (1979, 1983) tries to provide further explanations within the theory of TG tradition. Yang (1979) basically accepts Langacker's primacy constraint and proposes an additional constraint, namely the Plausibility Constraint, for zero-anaphora. He also extends Langacker's constraint to include the properties of "closeness," "case hierarchy," and "topicality" in addition to the original "precedence" and "command." Yet he claims that all other properties are component factors of the primacy property of "topicality," which is considered as the main characteristic of the Primacy Constraint. He summarizes his principle of topicality as follows:

The more topical nature or topicality an element has, the more likely it is to become an antecedent

of a zero anaphor. The primacy properties of "precedence," "closeness" "command," and "case hierarchy" add to "topicality." (p. 14)

Basically, Yang's Primacy Constraint is a functional one, since it is built on the notion of "topic," which is both functional and discoursal in nature rather than structural or sentential.

His additional constraint, the Plausibility Constraint, is stated as follows.

For a zero-anaphor and an NP to be coreferential, the context (sentential, discoursal, or pragmatic) in which they occur has to be coherent and plausible. (p.22)

He further proposes various sub-components for the Plausibility Constraint. They are Semantic Plausibility, Pragmatic Plausibility, Syntactic Plausibility, Indeterminacy, and Empathy.

Semantic Plausibility means that the coreference between an NP and a zero-anaphor may be allowed by the semantics of the matrix verb even if the Primacy Constraint would block this interpretation. By invoking Pragmatic Plausibility, some cases of zero-anaphor may not be coreferential with an NP within the sentence boundary, but with some other entity in the nonlinguistic or discourse context. More often, however, Syntactic Plausibility overrides the Primacy Constraint. For instance, structural parallelism between the

first and second clauses of a sentence restricts the coreference of zero-anaphora to an NP in a specific grammatical position only, such as the subject. A syntactically non-obligatory constituent such as genitive NP or ablative NP is what Yang calls Indeterminacy. This constituent can be understood as the antecedent of a zero-anaphor, but such an interpretation is made possible only by the Plausibility Constraint. Finally, Kuno's Ban on Conflicting Empathy Foci is another property which constrains coreference. Since a single sentence cannot contain logical conflicts in empathy relationships, the coreferential interpretation of a zero anaphor is prohibited if it entails such a conflict.

Yang (1979) thus concludes that the Primacy Constraint is a linguistic constraint, whereas the Plausibility Constraint is a basically non-linguistic or pragmatic constraint that does not uniquely pertain to zero-anaphora.

The argument for a non-structural constraint on anaphora is quite convincing. However, some details seem to be internally inconsistent. To be specific, Semantic Plausibility, a property of his Plausibility Constraint which is supposed to be a non-linguistic or pragmatic constraint, is neither non-linguistic nor pragmatic, either by definition or by content. As his examples (39 a-c) on page 22 show, it is a perfectly linguistic property. That is, the examples are the same kind as Lee's (1973) examples of coreference,

which depend on the "semantics of matrix or complement verbs," as mentioned above. Thus, the coreference in the examples can be accounted for by the semantics of the verbs. If Yang's argument is that semantics of verbs is non-linguistic or pragmatic, we need to re-define the common usage of semantics.

Furthermore, two additional properties of the Primacy Constraint, closeness and case hierarchy, do not seem to be necessary. Whereas Yang explains that the ambiguity of coreference arises from the competition of closeness and other properties of the Primacy Constraint, it is hard to define "closeness" in a discourse context. Sometimes, two NPs across sentence boundaries can be closer to each other than two NPs within a sentence. Since he considers "closeness" only within single sentences, it would be a problem to deal with NPs across sentence boundaries. The actual ambiguity of coreference usually arises because of the hearer's assumption about the context of the sentence. When an appropriate discourse or situational context is given, the ambiguity is easily solved. His case hierarchy almost completely corresponds to Keenan and Comrie's accessibility hierarchy. As we argued against the accessibility hierarchy in a previous section, it is doubtful whether such a hierarchy has anything to do with the anaphoric system.

Yang (1983), in a later attempt to modify Chomsky's GB theory by providing cross-linguistic examples, alters his

previous position on the weight of discourse constraints on anaphora. He puts discourse-bound anaphora in the peripheral category as opposed to the core category of syntactically bound anaphora. He states that

...they [discourse bound anaphors] should be at a level other than the level of s-structure where the core syntactic binding principles apply. Therefore, (80) [syntactic anaphor-binding principle] is a valid core anaphor-binding principle even if it cannot cover the above-discussed peripheral anaphor-binding phenomena. (p.188)

That the core-periphery distinction is unwarranted will be made clear in later chapters.

2.2.2. Beyond The Sentence Boundary

As many questions concerning the limitation of anaphora within the sentence boundary have arisen in recent literature, a number of Korean linguists have also voiced the need for discursial considerations in the analysis of anaphora.

Kang (1980) presents a discursial and pragmatic analysis of all personal pronouns including the third person pronouns ku and caki. Basically, she formulates all pronominalization as forward pronominalization of one kind or another and rejects backward pronominalization, in the sense that all pronouns should have an antecedent either within a sentence or within a discourse or pragmatic context.

Kang argues that reflexivization might not be an appropriate term for caki, because caki is often coreferential with an NP beyond a sentence boundary and its usage is quite different from the English reflexive pronouns. ku and caki are similar to each other in that their coreference can go beyond the sentence boundary, and they should have a third person antecedent. On the other hand, they differ from each other in some respects. Ku involves more ambiguity within a sentence boundary than caki, because it can refer to any third person NP in a discourse, while caki involves less ambiguity because it tends to refer to the subject. Though she sees the inadequacy of sentence-bound analyses of Korean anaphora, in many cases she merely points out the problems, while failing to provide a satisfactory solution.

Many of the data utilized in Kang (1980) are still sentential examples. Therefore, despite her intent, she formulates only the superficial conditions within sentence boundaries. She does not provide any careful examination of pronouns within the greater discourse. She notices that non-syntactic factors affect the choice of pronouns as well as syntactic factors do. However, she does not offer a satisfactory analysis of what these factors are and how they interact with syntactic factors.

Kim (1981) is another who argues that previous syntactic approaches can not explain anaphoric relations of caki.

Focusing on the reflexive pronoun caki in comparison with ku, he claims that an analysis of anaphora beyond the sentence boundary is necessary. However, his actual analysis does not go beyond the sentence boundary either.

Kim's main idea can be summarized as follows. The condition of caki within the sentence boundary is that its antecedent is a third person, animate subject and must both precede and command caki. Caki can be replaced by ku in many cases where it is an anaphor. In most cases, syntax does not seem to condition the interchangeability. Therefore, he believes that we need to look beyond syntactic conditions to understand the differences between caki and ku. He finds that the functions of caki are distinct from those of ku in that caki shows the speaker's point of view and is conditioned by "closeness" to its antecedent. Adopting Kuno's notion of point of view, Kim claims that if the speaker's point of view is located on a specific NP, this NP will be easily referred to by caki.

Kim (1981:49) further defines "closeness" as follows: When the antecedent and caki command each other, "closeness" is in the highest degree; when caki and the antecedent of two separate sentences are very close to each other superficially or within a speaker's discourse, "closeness" can be regarded as relatively "high"; when the antecedent commands caki, "closeness" will be lower across a clause boundary than within a clause boundary. Here, the "closeness" argument is

very weak. His examples do not seem to support his statements because "closeness" is a relative notion and it is necessary to define "closeness" in relation with elements other than the physical distance between caki and the antecedent. Recall, we already argued against "closeness" in Yang (1979). Yang himself also states that closeness is the weakest property of his primacy condition.

Following Givon's (1980) well-known topic continuity hypothesis, Hwang (1983) analyzes all forms of third person anaphora in terms of topic continuity and discontinuity. She seems to be the first one to analyze anaphora in Korean narrative discourse. Unfortunately, since Hwang deals with only one text of one writer, it is doubtful that we can generalize her analysis to any great extent. Still, her examination of overall anaphoric forms -- zero-anaphora, pronoun, definite NP, identifiable⁸, indefinite referential/non-referential (generic) NP's, and personal names -- is a significant step forward. In addition, Hwang also examines these anaphoric forms in relation to the topic marker nun in order to look at the degree of topic continuity.

Hwang's basic assumption is that topic continuity or discontinuity can be measured by these anaphoric forms. First these anaphoric forms, among the many other functions they have, signal varying degrees of topic continuity/discontinuity in discourse. Second, these anaphoric forms

indicate relative topic continuity/discontinuity not only in and of themselves but also via their various grammatical functions within a clause such as subject, object, etc. Third, the humanness/non-humanness of anaphoric forms expresses varying degrees of topic continuity/discontinuity.

There are some problems in Hwang's arguments. First, even though some of her conclusions seem to reflect Korean speaker's intuition, it seems that Hwang makes an unjustified generalization. She investigates only one text and draws conclusions on it. Furthermore, she does not provide the complete text she uses.

Second, Hwang's investigation of the anaphoric forms co-occurring with the topic marker nun is not completely reliable. She notes that she uses the term "topic as a very loose term to mean any arguments in discourse, regardless of what linguistic function they have in a given context" (p.73 Footnote 3). Hence, Hwang examines all the occurrences of anaphoric devices marked by the 'topic marker (n)un'. However, (n)un is not an exclusive topic marker in Korean, though many people regard it as such.⁹ The marker has another function than marking the topic, i.e., as a contrastive marker. Further, in some cases, topics are not marked by a particle at all, but rather by word order.

In addition to the literature mentioned above, Chang (1980) and Kim (1984) provide some helpful ideas for analyzing Korean anaphora and deixis.

Chang (1980) examines the semantic differences among the three deictic demonstratives, i, ku, and ce. She distinguishes the function of the three deictics into real, signal, and conceptual. When a real thing exists in the situation of speech acts, real deixis is required. When the real thing is far from the situations, one of the other two is preferred to real deixis. However, it seems that conceptual deixis is simply an anaphoric function and signal deixis is the deictic function of mental judgment.

On the other hand, Kim (1984) mainly examines the 15th century pronouns and shows that their functions are similar to those of the pronominals of modern Korean. Among the pronouns in the 15th century Korean language, reflexive pronouns are anaphoric expressions that function strictly in the linguistic context. At the same time, demonstrative pronouns have anaphoric functions as well as cataphoric functions.¹⁰ Demonstrative pronouns of 15th century Korean are basically deictic pronouns, but their functions extend to anaphora.

In sum, studies on anaphora are relatively fewer in Korean than in non-Korean literature. Most Korean literature deals with anaphora as a part of pronominal systems. The few exclusive studies of anaphora that exist fail to examine it in terms of a complete network. Some studies recognize the need of discourse analysis for anaphora; yet most of them do not go beyond the sentence boundary.

In the following chapters, we discuss anaphora in a discourse-oriented analysis. In doing so, we will attempt to provide a framework that integrates several different linguistic levels: syntax, semantics, and pragmatics.

Notes

1. See Bosch (1983) for more classical accounts of pronouns.
2. It seems that there are two groups of linguists who are involved in the cognitive consideration of language phenomena. First, psychologists who are trained as psycholinguists. Second, linguists who are trained in traditional linguistics but tend to examine data longer than the sentence to find more practical explanations for linguistic phenomena.
3. McCray (1980) and Bosch (1983) provide counterexamples to Reinhart (1976).
4. Bosch (1983), p.25.
5. Ross (1969) already notices this phenomenon in terms of "sloppy identity" and Partee (1975) suggests two classes of this kind: pronouns-as-variables and pronouns of laziness.
6. Kim (1976)'s unrealistic data have been regarded as representative of those studies which tried to fit an English-biased western theory into a typologically distinct language like Korean. Iksup Lee, in a recent discussion about the matter. (cf. "Discussion. Theory and Data in Linguistics" in Ohak Yongu, 1986, Language Research pp. 103-141, Language Research Institute, Seoul National University, Seoul, Korea), states "Kim (1976) is the first Korean who received Ph.D. in Linguistics from MIT providing many awkward sentences How can we accept the fact that this dissertation is built with a majority of such (unacceptable) examples? This is the extreme case (translated by the author)."
7. In English versions, parentheses indicate literal translations, here and elsewhere.
8. An identifiable, following Chafe (1976), is an unmarked definite NP, while a definite NP is marked by a deictic demonstrative. Structurally, repeated nouns without any deictic demonstrative can be regarded as Identifiable. Definiteness of Identifiable is interpreted by the discourse context.

9. Kim, Sung-Uk (1983) provides some arguments for nun in the same direction.

10. Kim does not actually use the term "cataphoric." Instead, she just uses "anaphoric" for both "anaphoric" and "cataphoric" references.

CHAPTER THREE

SYNTACTIC CONDITIONS OF KOREAN ANAPHORA REVISITED

As we have seen in the review of literature in the previous chapter, many writers provide various syntactic, semantic, and discursal conditions on anaphora. In this chapter, we will concentrate on the syntactic analysis of the Korean anaphora. As some recent effort has been devoted to the c-command relations as a crucial notion in the binding theory of anaphora coreference, we will first look at the notion of c-command.

Before going into details, we need to clarify what kind of language data is utilized here. Many grammarians make up their own sentences and poll native speakers for the grammaticality of those sentences. But grammaticality can vary according to dialects, idiolects, or individual linguists.¹ As a result many awkward sentences appear as examples. Such artificially constructed sentences provide more confusion than anything else. Since our aim is to understand and to explain natural language phenomena, it is necessary to collect language data as used in natural situations. Therefore, this study tries to look at actual sentences in narrative discourse.

For the time being, we must disregard discoursal effects in order to isolate syntactic and semantic factors within the sentence boundary.

A traditional question about pronominal anaphora is how pronouns refer. In addition, TG linguists address one more problem: "under what circumstances can two expressions be regarded as anaphorically related (and under what circumstances is such an interpretation excluded)?" (Bosch 1983:26).

Researches consistently fail to discover these conditions. This is due to the belief that these conditions are to be found only in syntactic structures. We show in subsequent chapters that they are not only syntactic but also semantic and discoursal in nature. In this chapter, however, we will take up only the syntactic conditions for the choice of anaphoric forms.

First, I will examine the c-command condition to see whether it is viable for Korean anaphora. Second, some conditions which allow the speaker to choose one anaphoric form over others are discussed.

3.1. Constituent Command Conditions

The most useful syntactic property applicable to different (definite) anaphoric relations is a version of the Constituent-Command (henceforth c-command) condition suggested by Reinhart (1976). Arguing against Langacker's notion of

a precede-command relation, Reinhart instead suggests a c-command relation to handle the problem of definite NP anaphora. As she claims, the syntactic domain of c-command seems to be more natural than the syntactic domain of precede-command because the domains defined by c-command are always constituents. The difference between the relations of precede-command and those of c-command is that while the former mentions linear order the latter does not. It seems obvious that the linear order of constituents plays no role at least in sentential anaphoric relations in English, though it may play a crucial role in discoursal anaphoric relations. The relations between linear order and discoursal anaphora are to be discussed in the following chapters.

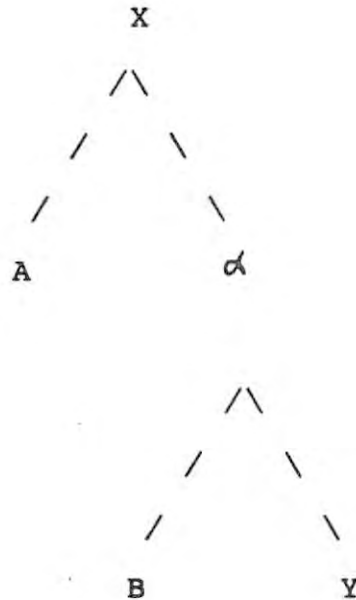
Before looking at the syntactic conditions in terms of c-command relations with regard to Korean language data, let us first present the definition of c-command and the conditions on anaphora, as suggested by Reinhart (1983).

- (1) Node A c-commands a Node B iff the branching node most immediately dominating A also dominates B. (Reinhart 1983:18).

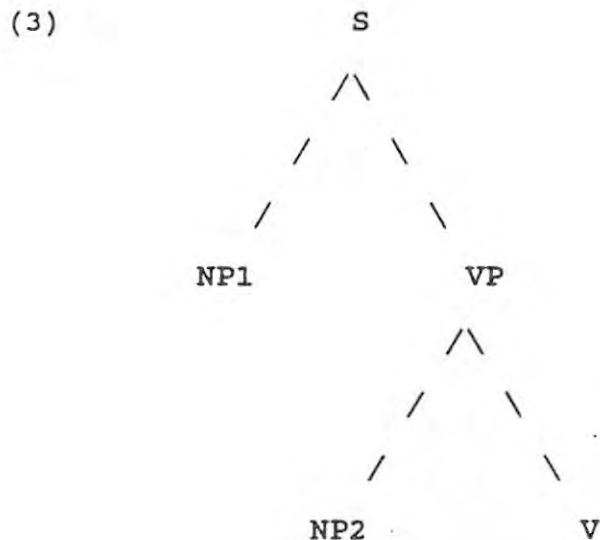
The relation c-command defines the syntactic domain of a given node as follows.

- (2) The domain of a node A consists of all and only the nodes c-commanded by A (Reinhart 1983:19)

The node A c-commands the node B because the first branching node (X) above A also dominates B in the following tree:



Consider the tree structure of (3).² Here NP1 c-commands NP2 because the branching node S most immediately dominating NP1 also dominates NP2. But the converse is not true, since the branching node VP most immediately dominating NP2 does not dominate NP1.



Reinhart further formulates two anaphora conditions as in (4) and (5).

- (4) A given NP must be interpreted as non-coreferential with any distinct non-pronoun in its c-command domain. (Reinhart 1983:43)
- (5) A given NP must be interpreted as non-coreferential with any non-R(eflexive or reciprocal) pronoun in its domain if the NP is dominated by the minimal governing category dominating the pronoun (i.e., if the pronoun is in a reflexivization environment). (Reinhart 1983:33)

The second condition is restated in two ways:

- (a) A reflexive or reciprocal pronoun (an R-pronoun) must be interpreted as coreferential with (and only with) a c-commanding NP within a specified syntactic domain (e.g., its minimal governing category);³

- (b) A non-R-pronoun must be interpreted as non-coreferential with any c-commanding NP in the syntactic domain which is specified for (5a). (Reinhart 1983:136)

Here (5a) specifies the conditions for obligatory coreference, while (4) and (5b) determine the conditions for obligatory non-coreference interpretation. And when neither of these conditions apply, the sentence allows optional coreference.

Now we shall examine the empirical motivation for the conditions.

3.1.1. Simple Sentences

Let us first see how condition (5) blocks or allows anaphoric relations within a minimal governing category, i.e., a simple sentence structure such as (3) above. (5a) actually says that reflexive pronouns must have a c-commanding antecedent within some minimal governing category, usually the same S, while (5b) says the pronoun cannot have a c-commanding antecedent within the same structure. Thus, (5a) allows caki "self" in (6), and (5b) blocks the coreference interpretation of ku (a third person pronoun) with its c-commanding NP in (6).

- | | | | | |
|-----|-----------------------|------------------------------|------------------------|------|
| (6) | Kulena | Yucaymyeng _i -nun | caki _i -lul | alko |
| | But | TO | *ku _i -lul | know |
| | issetta. ⁴ | | | |
| | be | | | |

'But, Yucaymyeng knew himself.' (Sintonga:145)

Applied to sentences with the structure of (3), the condition allows the reflexive pronoun, but blocks the pronoun.

Condition (5a) captures the fact that reflexive pronouns in English can be controlled only within a restricted domain which distinguishes them from regular pronouns. That is, sentences (7) and (8) show that they can be coreferential with an NP within the minimal domain, i.e., the simple clause, but not across a clause boundary.

(7) *Zelda_i believes that Felix adores herself_i.

(8) *The managers_j like Zelda's presents to each other_j.

Nevertheless, this is not the case in Korean. We need to reconsider (5a) in light of the Korean reflexive. Korean allows caki to be coreferential with an NP across a simple clause boundary, even across a sentence boundary, as well as within a simple clause. For example,

(9) Zelda_i-nun Felix_j-ka caki_i-lul samohantako
TO SU DO adore

sayngkakhanta.
think

'Zelda_i thinks that Felix_j adores self_i (her).'

(10) Kimkyoswu_i-nun enceyna ilen mal-ul hamyense,
Prof. Kim TO always such word DO do

caki_i-ka cikcep khephiphothu-lul kkenaye
SU directly coffee pot DO take out

mwul-ul kkulinun kesietta.
water DO boil is

(Sintonga, p.394)

'While Prof. Kim_i always said such words,
self(he)_i took out the coffee pot and boiled
water.(i.e., by himself).'

(11)Yucaymyeng_i-un kyewu kilyek-ul hoypokhaytta.

Ø_i namaitnun swulcan-ul tanswumey tulikhiko
Ø_i angkhol-ul chenghaytta. Kulena Ø_i C-uy
cheli mwunceylo sayngkaki toytolakaca Ø_i
tasi wuwulhaycyetta. Caki_i-uy kyeltanlyekulosen
C-lul chupanghaci mothal kesilan sayngkakkwa
tepwule..... (Sintonga, p.441)

'Yucaymyeng_i just got over. He_i drank the rest
of liquor and (he_i) asked one more. But as soon
as (he_i) remembered the problem with C, (he_i)
became gloomy again. (He_i thought that) self_i's
decision cannot expel C

The coreference of caki with another NP beyond a clause boundary, as in (9) and (10), and beyond a sentence boundary as in (11), is not covered by the condition in (5a). Such anaphoric relations of caki beyond a minimal clause do not occur under any special conditions, but are found frequently in ordinary sentence structures. Since the anaphoric relations across the sentence boundary as in (11) goes beyond what is usually considered syntax, they need not be our concern here. They will be discussed in Chapters Five and Six.

Returning to (6), caki has a c-commanding antecedent within its minimal clause and the pronoun ku is blocked in the same structure. These two facts in (6) suggest that caki's grammatical status is just like that of its corresponding English reflexive pronouns. On the other hand, however, caki is not like the English reflexive because it is also perfectly acceptable in (9), (10), and (11) where it can be coreferential with an NP outside its minimal clause across a clause boundary, and across a sentence boundary. As O'Grady (1987) points out, this suggests that Korean has two homophonous caki's: one the equivalent of English reflexives; the other corresponding to English him/her. However, the latter is not an exact correspondance to English pronouns, as shown in the following examples.

- (12) Harry_i-ka John_j-eykey { caki_{i/j} } -lul kewulo
 SU IO { ku_j } DO mirror
 *ŝ_{i/j} }
 pichwuepoyecwu-etta.
 show

- (13) Harry_i showed John_j himself_{i/j} in the mirror.

(O'Grady 255)

- (14) *Harry_i showed John_j him_{i/j} in the mirror.

(O'Grady 255)

Korean allows both the reflexive and the pronoun in (12) where English allows only a reflexive as in (13). In (14), neither of the two NP's can serve as an antecedent of him.⁵

Thus, more accurately, Korean has two caki's: one is the equivalent of English reflexives; the other syntactically interchangeable with the pronoun ku, which is not an exact counterpart of the English pronouns him/her. Therefore, condition (5a), which states the coreference of caki with another NP only within a minimal domain, is too narrow to capture the Korean facts in sentences (9) or (10), where caki takes an NP, Zelda or Kim kyoswu, as an antecedent outside of a minimal domain. Furthermore, sentences like (15), in which caki is coreferential with the non-commanding NP John, cannot be dealt with by condition (5a), either.

- (15) [_{NP} [_S John_i-i ikiettanun] sosik-i] caki_i-uy
 SU won news SU GE

chinkwu-lul kippukeyhaycwu-etta.
 friend DO pleased

'The news that John_i won pleased self's_i
 friend.'

(O'Grady 253)

Sentences like these not only challenge the view that reflexives must be coreferential with a c-commanding NP, but also weaken the requirement of a minimal domain for the coreference of reflexives. It might seem plausible at this point to distinguish two conditions for the two caki's: caki₁ would be subject to the condition (5a), while caki₂ would not.

Let us put off a proposal for the condition for caki₂ until we have considered condition (5b) for the pronoun.

As we have seen in (12), Korean differs from English in not requiring a reflexive in the minimal clause where English does require one, especially when the coreferring full NP is the non-subject. Sentence (16) is an example with a coreferring non-subject NP.

- (16) John_i-i Tom_j-ul { caki_{i/j} } -eykey kewulo
 SU DO ku_j IO mirror
 * \emptyset _{i/j}

pichwuepoyecwuetta.
 showed

'John showed Tom to self_{i/j}/him_j in the mirror.'

In the following examples, caki is also in free variation with the pronoun ku where the antecedent lies outside the minimal NP or S containing it (17-18) or does not function as an argument within that phrase (19-20).

- (17) John_i-i [s Tom_j-i { caki_{i/j} } -lul
 SU SU ku_i DO

piphanhayettako malhaytta.
 criticized said

'John_i said that Tom_j criticized self_{i/j}/him_i.'

- (18) John_i-i [s Tom_j-i [NP { caki_{i/j} } -uy chayk-ul]
 SI SU kui GE book DO

ilhettako] malhaytta.
 lost said

'John_i said Tom_j lost self's_{i/j}/his_i book.'

- (19) [NP John_i-uy kwake-ka] { caki_i } -lul koylophinta.
 GE past SU kui DO ail

'John_i's past ails self_i/him_i.'

- (20) [_{NP} Tom_i-i ikiettanun sasil-i] { caki_i } -lul
SU won fact SU { ku_i } DO

kippukeyhaycwuetta.
pleased

'The fact that Tom_i had won pleased self_i/him_i.'

We have seen that ku in (12) and (16-20) are not subject to condition (5b), either. Now let us examine examples with zero-anaphor.

- (21) *John_i-i Tom_j-i $\theta_{i/j}$ piphanhayettako
malhayetta.

- (22)?John_i-i [_{NP} δ_i chayk-ul] ilhetta.⁶

- (23)* [_{NP} John_i-uy kwake-ka] Ø_i koylophinta.

- (24)*_[NP Tom_i-i ikiettanun sasil-i] θ_i
kippukeyhaycwuetta.

The pronouns in (17-20) are replaced by the zero-anaphor as in the above examples. However, zero is not allowed in (21-24) except in (22) where the possessive NP could occur. Despite the fact that Korean does not usually utilize possessive NPs the way English does, the coreference in (22) is possible. But without any context, the sentence can also be interpreted as containing a bare NP, having the meaning of "an indefinite book," which does not belong to anybody.

From the examples in (12-24), we can formulate the following principles:

- (25) The pronoun ku cannot be coreferential with its c-commanding subject in the minimal phrase.⁷
- (26) Zero-anaphor must not be allowed in an argument NP position.

Condition (25) accounts for the impossibility of a pronoun in (12), (16), (17) and (18) (where it cannot be coreferential with the subject in its minimal phrase) and its admissibility in (16) and (20) (where it is coreferential with the non-subject or with the subject outside the minimal NP. Condition (26) accounts for the impossibility of a zero-anaphor in (12), (16), (21), and (23-24), and its admissibility in (22), where the zero-anaphor is not in an argument position.

Where the condition for Korean differs from that in English is in the direct reference to grammatical relations. In our case, the grammatical relation is the subject. O'Grady also points out the importance of the subject. However, for the zero-anaphor, we need to consider whether an argument or non-argument position is concerned, as in the principle (26). A condition formulated solely in terms of

c-command would be too strong to capture the Korean anaphora, since it would incorrectly rule out examples where a pronoun could be coreferential with a c-commanding non-subject (e.g., 12 and 16).

Let us now return to the condition for caki. We have assumed that Korean has two caki's. It is necessary to find a way to explain the coreferences of both caki's.

It has traditionally been assumed that the reflexive must be coreferential with the subject NP as in (27).

- (27) John_i-i Tom_j-ul caki_i-uy pang-eyse miletta.
 SU DO GE room LO pushed

'John_i pushed Tom_j in self's_i room.'

(O'Grady 257)

Or, when the subject is not a third person NP with a human referent, the reflexive can be coreferential with other NPs in cases like (28-30).

- (28) Nay_i-ka Tom_j-ul caki_i-uy pang-eyse miletta.
 I SU DO self GE room LO pushed

'I_i pushed Tom_j in self_i's room.'

- (29) Nay_i-ka John_j-ul caki_i-uy cip kunche-eyse
 I SU DO GE house near LO

poatta.
 saw

'I_i saw John_j near self_i's home.'

- (30) [caki_i-ka ikin sasil-i] John_j-ul
 SU won fact SU DO

kippukeyhayetta.
pleased

'The fact that self_i won pleased John_i.'

On the other hand, when caki occupies the subject position, it is not coreferential with the other NPs as in (31) and (32).

(31) *John_i-ul caki_i-ka pipphanhayetta.
DO SU criticized

'John_i self_i criticized.'

(32) *[John_i-i ssun chayk-ul] caki_i-ka ilketta.
SU wrote book DO SU read

'The book that John_i wrote, self_i read.'

The existence of sentences like (27-32) has led to a proposal of relational hierarchy in (33) and the principle for caki in (34) by O'Grady (1987:260 & 263):

- (33) a. Subject
b. Verbal Complements (Direct Object, Indirect Object, Postpositional NP)
c. Other NP's (NPs which are non-argument of the verb)
- (34) A reflexive pronoun must be bound by an NP contained in a phrase which is higher or equal (in the hierarchy).

In sentences (31) and (32), the reflexive is a subject (the topmost rank in the hierarchy) though the order is reversed with the object, while the other NP is a direct object or is

in a direct object phrase which is lower than the subject caki. Hence, both are unacceptable according to principle (34). On the other hand, in (27) both the subject NP, John, and the object NP, Tom, are higher than caki in the hierarchy. However, caki corefers only with the subject, because the subject is the highest in the hierarchy. In (28) and (29), the antecedent is the direct object, which is higher on the hierarchy than the genitive caki. Since the subject NP is the first person, the NP in the direct object phrase is the only eligible antecedent of caki. In (30), the antecedent is in the direct object phrase, which is higher than the reflexive (a non-argument in the matrix clause).

At this point, we need to clarify how (33) and (34) work; otherwise O'Grady's examples might lead us to confusion. First, examine the following examples from O'Grady(1987).

- (35) [_{NP}[_S John_i-i ikiesstanun] sosik-i] { caki_i }-uy
SU won news SU { ku_i } GE
*θ_i

chinkwu-lul kippukeyhaycwyesta.
friend DO pleased

'The news that John, won pleased self,'s friend.'

(O'Grady 1987:55)

- (36) [John_i-uy kwake-ka] caki_i-lul koylophinta.
 GE past SU DO ail

'John's, past ails self,.' (O'Grady 1987:56)

- (37) [_{NP} [_S Caki_i-ka ssun] chayk-i] John_i-ul
self SU wrote book SU DO

kippukeyhaytta.
pleased

'The book that self_i wrote pleased John_i.'

(O'Grady 1987:57)

- (38) nay-ka [_{NP} John_i-uy chayk-ul] caki_i-uy cip-ey
I SU GE book DO self GE houseLO

kacta noassta.
brought put

'I brought John's_i book to self's_i home.'

(O'Grady 1987:58)

O'Grady explains that in (35) and (36), the antecedent is contained in the subject phrase, which is higher in the hierarchy than the reflexive (a genitive or direct object), while in (37) and (38) the antecedent is contained in the direct object phrase, which is higher than the reflexive (a non-argument in the matrix) (pp.262-264).

However when we take a closer look at (35) and (37), we notice that O'Grady treats the two instances of the same structures differently. Both (35) and (37) have a relative clause modifying the subject. In the relative clause, the subject argument is John in 35 and caki in 37. If the caki in (37) is regarded as a non-argument in the matrix clause, as O'Grady says it is, then John in (35) would be a non-argument too. Thus, according to (33) and (34), sentence (35) should not be allowed. Or, if John is regarded as contained in the subject phrase and thus is higher in the

hierarchy than the reflexive in (35), then the caki in (37) would be also higher in the hierarchy than the object antecedent. Thus, (37) should not be a possible sentence.

Furthermore, if a genitive is a non-argument NP as O'Grady says (p.258), the John in (36) is certainly such a one. Therefore, the coreferentiality in (36) should be impossible, contrary to O'Grady's explanation.

To further clarify the status of the genitive, we will examine some more examples.

- (39) [John_i-uy cip-i] caki_i-eykeynun khun
 GE houseSU self IO much

pwutamietta.
 burden

'John_i's house is a big burden to self_i.'
 (John's house burdens himself very much.)

- (40) [John_i-uy chinkwu_j-ka] caki_{*i/j}-lul
 GE friend SU self DO

pipphanhaytt.
 criticized

'John_i's friend_j criticized self_{*i/j}.'

In (40), caki can be interpreted as coreferring with the subject chinkwu "friend" but not with the genitive John. This fact supports principle (34) only when genitives are regarded as non-argument NPs. On the other hand, if a genitive is recognized a non-argument NP, John in (36) and (39) should be lower than caki in the hierarchy and the coreference between them should be impossible. As a matter of fact, (36)

and (39) are not initially accepted by many Korean speakers. All thirteen native speakers who were asked regard these sentences as "weird," "artificial," etc. Four of them accepted them later, but noted that they sound like literal translations of English. Sentences (36) and (39) are rewritten with both a star and a question mark here.⁸

(36')?*[John_i-uy kwake-ka] caki_i-lul koylophinta.
 GE past SU DO ail

'John's_i past ails self_i.' (O'Grady 1987:56)

(39')?*[John_i-uy cip-i] caki-eykeynun khun
 GE houseSU self IO much

pwutamietta.
 burden

'John_i's house is a big burden to self_i.'
 (John's house burdens himself very much.)

If we flip John and caki in (36), (39), and (40), we get (41), (42), and (43), respectively, in the following.

(41) [caki_i-uy kwake-ka] John_i-ul koylophinta.
 self GE past SU DO ail

'Self_i's past ails John_i.'

(42) [caki_i-uy cip-i] John_i-eykeynun khun
 self GE houseSU IO big

pwutamietta.
 burden

'Self_i's house was a big burden to John_i.'

(43)?[caki_i-uy chinkwu-ka] John_i-ul piphanhaytta.
 self GE friend SU DO criticized

'Self_i's friend criticized John_i.'

Sentences in (41)-(43) are readily acceptable because caki has been made the genitive that is lower than John, the object on the hierarchy.

On the basis of the above facts, it is reasonable for us to state the relative position of the genitive on the hierarchy. Principles (33) and (34) are thus rewritten as follows.

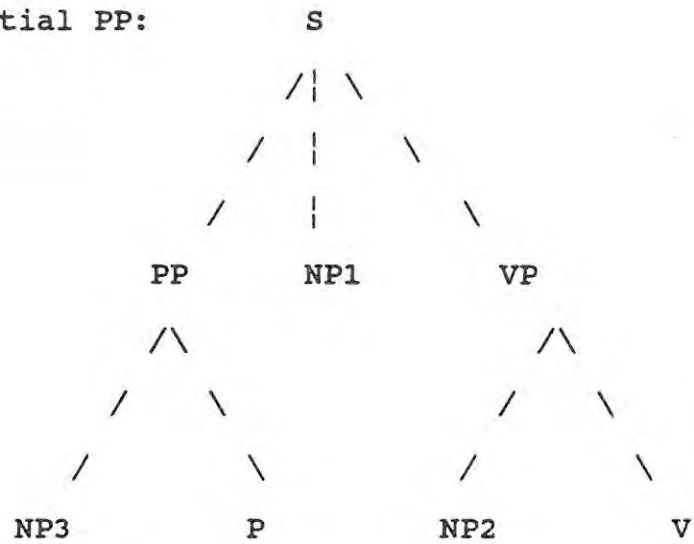
- (33') a. Subject
- b. Verbal Complements
- c. Non-argument NPs, including genitives
- (34') A reflexive pronoun must be bound by an NP contained in a phrase which is higher or equal (in the hierarchy).

The principles remain neutral to c-command relations; they make direct reference to grammatical relations.

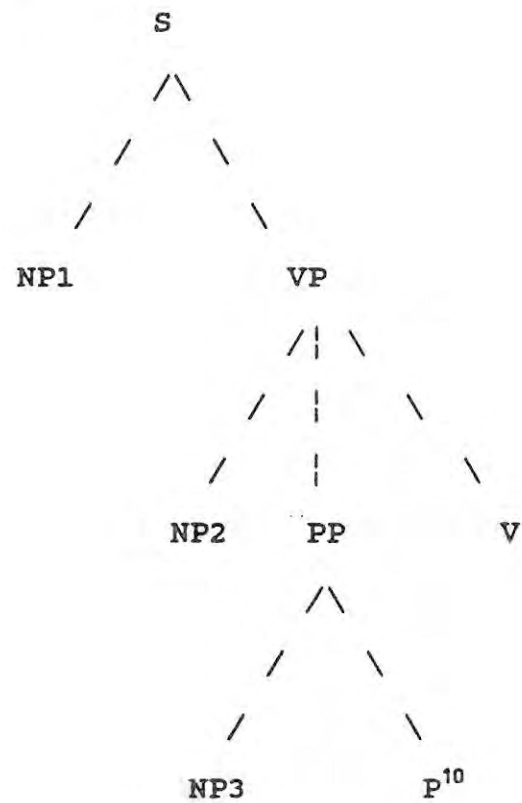
3.1.2. Sentences with PP

Let us now examine sentences with Postpositional Phrase (PP henceforth).⁹ There are two possible PPs: Sentential and Verb-phrase. For ease of presentation, their syntactic trees are illustrated in (44 a-b) respectively.

(44) a. Sentential PP:



b. Verb-Phrase PP:



In (44a), NP1 c-commands both NP2 and NP3. In (44b), NP1 also c-commands both NP2 and NP3. Furthermore, NP2 c-commands NP3 as well.

The followings are examples of sentential PPs. All of them have the configuration in (44a) and therefore NP1, NP2, and NP3 will be used to designate the corresponding NP.

- (45) Ku_i-uy 50tay choey Phichentukssi_i-nun Sanho-wa
he GE fifties early Mr. Phi TO Coral-and

Cincwulanun phyoceylo simwunsencipul
Pearl titled anthology of poetry

kanhaynghaytta.
published

(Hemwulepnuniwaury Tayhwa, p.181)

'In his_i early 50's, Mr. Phichentuk_i published
his anthology titled "Coral and Pearl".'

- (46) Ku_i-uy kopaykulo poa Kwucongthay_i-nun imi
he GE confession see TO already

na-wa na-uy nolay-lul alko itta.
I and I GE song DO know be

(Cey 3uy Hyencang, p.172)

'By his confession, Kwucongthay already knew
me and my song.'

- (47) Hwaksiney chan kemsai_i -uy ecoeysey
certainty full district attorney GE voice

na-nun imi ku_i-uy simcwungul cimcakhaytta.
I TO already he GE mind DO guessed

(Cey 3uy Hyencang, p. 241)

'From the district attorney_i's definite voice,
I read his_i thought.'

- (48) Phichentukssi,-uy 50-tay choey ku,-nun
Sanho-wa Cincwulanun phyoceylo simwunsencipul
kanhaynghaytta.
- (49) Kwucongthay,-uy kopaykulo poa ku,-nun imi nawa
na-uy nolaylul alko itta.
- (50) Hwaksiney chan ku,-uy ecoeysey nanunimikemsa,
-uy simcwungul cimcakhaytta.
- (51) Kwucongthay,-nun ku centosa,-uy kocipsulen
TO that evangelist GE stubborn
chimmwuk sokey pwunmyenghan ku,-uy solil-ul
scilence inside conspicuous he GE sound DO
tutko-itta.
listening be
- (Cey 3uy Hyencang, p.130)
- 'Kwucongthay, is listening through the
evangelist's; persistent silence to his,
words.'
- (52) Kwucongthay,-nun ku,-uy kocipsulen
chimmwuksokey pwunmyenghan centosa,-uy solilul
tutko itta.

Sentences in (45-47) are taken from a novel. Sentences in (48) - (50) are their copies but with the full NPs and pronouns reversed in their positions. In (45) and (46), although the pronoun, represented as NP3 in (44a), is c-commanded by NP1, coreference is possible. Here principle (25) does not apply, because the NPs are not in a minimal phrase. Sentence (47) shows a coreference relation of NP2 and NP3. The NPs do not c-command each other, nor are they in

a minimal phrase. Their coreferences are not blocked. When the positions of the two NPs in (45-47) are reversed as in (48-50), the coreference is not blocked either, because non-c-commanding relationships between the NPs remain the same. In fact, all Korean speakers who were asked accepted these coreferences.

Sentences (51) and (52) are cases where two different full NPs, Kwucongthay, centosa 'evangelist,' and the pronoun ku are involved. Here Kwucongthay is NP1, centosa is NP3, and ku is NP2 in (51), while centosa and ku are reversed in (52). Principle (25) does not block the coreference between Kwucongthay and the pronoun ku in (51), because they are not in a minimal phrase. However, their coreference is not acceptable for pragmatic reasons. Sentence (51) means that kwu can understand what centosa 'evangelist' has been thinking, even though the evangelist does not say a word. The Korean speakers I polled all agree that ku-uy soli 'his word' can only be the evangelist's and not kwu's. This shows that some coreference interpretations even at the sentence level cannot be handled by syntactic principles like (25) alone. Semantics and pragmatics must intervene. On the other hand, ku in (52) is coreferential with kwucongthay and (52) means something totally different from (51). That is, kwu remains silent when listening to centosa 'evangelist.' On the other hand, centosa and ku are coreferential in both examples, because NP2 and NP3 are not in c-commanding relations.

caki in (56) cannot refer to the following NP, Kwu, by principle (34'), because the NP(genitive) is lower than caki on the hierarchy.

From the discussion of (53) - (56), we have proven that our principles (25) and (34') are reasonable.

Now, let us take another look at the above examples with other anaphoric forms, including caki. For this purpose, all pronouns are replaced by other anaphoric forms as follows.

(45') { $\begin{matrix} \text{Caki}_i \\ \emptyset_i \\ *kusalami \\ ?Phichendukssi_i \end{matrix} \}$ -uy 50tay choey Phichentukssi_i

-nun Sanho-wa Cincwulanun phyoceylo
simwunsencipul kanhaynghaytta.

(46') { $\begin{matrix} \text{Caki}_i \\ \emptyset_i \\ *kusalam_i \\ \text{Kwucongthay}_i \end{matrix} \}$ -uy kopaykulo poa Kwucongthay_i-nun

na-wa na-uy nolay-lul alko itta.

(47') Hwaksiney chan kems_a_i-uy ecoeysey na-nun

{ $\begin{matrix} ?caki_i \\ \emptyset_i \\ *kusalam_i\text{-uy} \\ \text{Kems}_i \end{matrix} \}$ -uy simcwungul cimcakhaytta.

(48') Phichentukssi_i-uy 50-tay choey { $\begin{matrix} *caki_i \\ ?\emptyset_i \\ ?kusalami \end{matrix} \}$ -nun

Sanho-wa Cincwulanun phyoceylo simwunsencipul
kanhaynghaytta.

(49') Kwucongthay_i-uy kopaykulo poa { $\begin{matrix} *caki_i \\ ?\emptyset_i \\ kusalami \end{matrix} \}$ -nun

imi nawa nauy nolaylul alko itta.

- (50') Hwak siney chan $\left\{ \begin{array}{c} *caki_i \\ ?\theta_i \\ *kusalam \end{array} \right\}$ -uy ecoeysey nanun

kemsa_i-uy simcwungul cimcakhaytta.

- (51') Kwucongthay_i-nun ku centosa_j-uy kocipsulen
chimmwuk sokey pwunmyenghan $\left\{ \begin{array}{c} caki_{i/*j} \\ \theta_{i/*j} \\ *kusalam_{i/j} \end{array} \right\}$ -uy

solil-ul tutko itta.

- (52') Kwucongthay_i-nun $\left\{ \begin{array}{c} caki_{i/*j} \\ ?\theta_{i/j} \\ *kusalam \end{array} \right\}$ -uy kocipsulen

chimmwuksokey pwunmyenghan centosa_j-uy solilul
tutko itta.

- (53') $\left\{ \begin{array}{c} *caki_i \\ ?\theta_i \\ *kusalam_i \\ Centosa_i \end{array} \right\}$ -nun kyesok kwenchongul centosa_i

aphey naymile nouchae...

- (54') Okemsa_i(NP1)-nun $\left\{ \begin{array}{c} caki_{i/*j}(\text{NP2}) \\ ?\theta_{i/j} \\ *kusalam_{i/j} \\ Okemsa_i/Kwu_j \end{array} \right\}$ -lul

kwucongthay_j(NP3)-uy pangey katwuetta.

- (55') Centosa_i-nun kyesok kwenchongul $\left\{ \begin{array}{c} caki_i \\ ?\theta_i \\ *kusalam_j \end{array} \right\}$ -uy

aphey naymile nouchay...

All the examples show that caki does not seem to have any problem with principle (34') except in cases of (47') and (50'). According to (33'), both genitive NPs in (50),

Kemsa-uy and caki-uy are equally ranked on the hierarchy. Therefore, they should be potentially coreferential in both examples. However, Korean speakers regard them as "unacceptable" or at best "weird." Although the reason is not yet clear, there is one suspect. Since Korean sentential PP's are almost like clauses, a sentence with a sentential PP looks more like a coordinate structure. Thus, the relationship between a sentential PP and the sentence in which it occurs is more discoursal than strictly syntactic in nature. More details about coordinate structures are to be discussed in a later section.

Zero-anaphors are possible in most cases. In Korean discourse, even argument NPs like subjects or objects can be elided easily.

Kusalam is an anaphoric form mainly for discourse purposes. It is therefore not considered acceptable in isolated sentences, where other anaphoric forms may be possible. Some Korean speakers accepted kusalam in (47'), (48'), and (50'). This seems to be due to the discoursal nature of the sentences with a sentential PP, as we mentioned before. More details about kusalam will be presented in a later section of this chapter.

Finally, a full NP is possible anywhere, although some Korean speakers added that the second appearance of the full NP may go with casin as in the following.

- (57) Kwucongthay,-uy kopaykulo poa kwucongthay,
casin-un imi nawa nauy nolaylul alko itta.
- (58) *By John,'s confession, John, already knew me
and my song.

Unlike the English example in (58), where one of the instances of John must be a pronoun if coreference is meant, Korean utilizes repetition of full NPs very easily for anaphoric purposes. Now we could add the following principle.

- (59) Full NPs can corefer with another full NP in an antecedent position freely.

Although, casin means "self," it is not exclusively a third person anaphoric form. It combines with any personal pronoun in singular and plural. For instance, na casin 'I,' ne casin 'you,' ku casin 'he,' wuli casin 'we,' kutul casin 'they,' and caki(tul) casin 'self,' It can combine with nouns, e.g., ai(tul) casin 'child(ren),' kwunin(tul) casin 'soldier(s),' taythonglyeng(tul) casin 'the president(s),' and etc. Thus, casin does not seem to perform any anaphoric function by itself and we will not elaborate on it any further. At this point, we leave casin for future studies.

3.1.3. Sentences with Embedded Clauses

Sentences with embedded clauses behave a bit differently from other structures in terms of anaphoric coreference. Let us consider those with the object complement and those with the subject complement.

3.1.3.1. Complement clauses

In the complement construction, some anaphoric relations could be blocked by condition (5). The object complement is of this kind. Since the object complement is attached to the NP which is dominated by VP, it is c-commanded by the matrix subject NP. Consider the following.

- (60) Im-ssi_i-nun "saynghwaluy palkyen"eyse
Mr.Yim SU "Discovery of Life" LO

$\left\{ \begin{array}{l} ku_i \\ \cancel{\delta}_i \\ caki_i \\ *kusalam_i \\ Imssi \end{array} \right\}$	-ka kitokkyo sincaka anilako SU Christian not
--	--

yekselhayessuna.....
claim

'Mr. Yim_i claims that he_i is not a Christian in
(his book) "Discovery of Life".'

(HemwulepnuniwauyTayhwa, p.74)

- (61) $\left\{ \begin{array}{l} *Ku_i \\ ?\cancel{\delta}_i \\ *Caki_i \\ *kusalam_i \\ Imssi \end{array} \right\}$ -nun "saynghwaluy palkyen"eyse

Im-ssi_i-ka kitokkyo sincaka anilako

yekselhayessuna.....

In (60), coreference is not blocked whether the c-command condition is met or not, because the anaphoric forms (including the pronoun) and their antecedents are not in a minimal phrase. Note that the definite NP anaphor kusalam, as a discoursal form, sounds awkward in a single sentence in (60).

On the other hand, the inversion of each anaphoric form with its antecedent in (61) should not block their coreferential relation because, although the anaphoric form c-commands the antecedent NP, they are not in a minimal phrase, either. However most of the anaphoric forms in (61) are not acceptable in their coreferential interpretation. Sentence with Imssi 'Mr. Im' is the only exception, because a full NP usually does not operate under any coreference restriction, as stated in principle (59). Thus sentences with object complements does not need the c-command condition.

Next, observe the subject complement clause.

- (62) $\left\{ \begin{array}{l} *Ku_i \\ ?\emptyset_i \\ *Caki_i \\ Kusalam_i \\ Chelswu_i \end{array} \right\} \begin{array}{l} -ka \text{ tayhak-ey hapkyekhan kes-i} \\ \text{SU college LO be admitted thing SU} \end{array}$
- Chelswu_i-lul kippukey haytta.
DO please do
- 'That he was admitted to a college pleased Chelswu.'

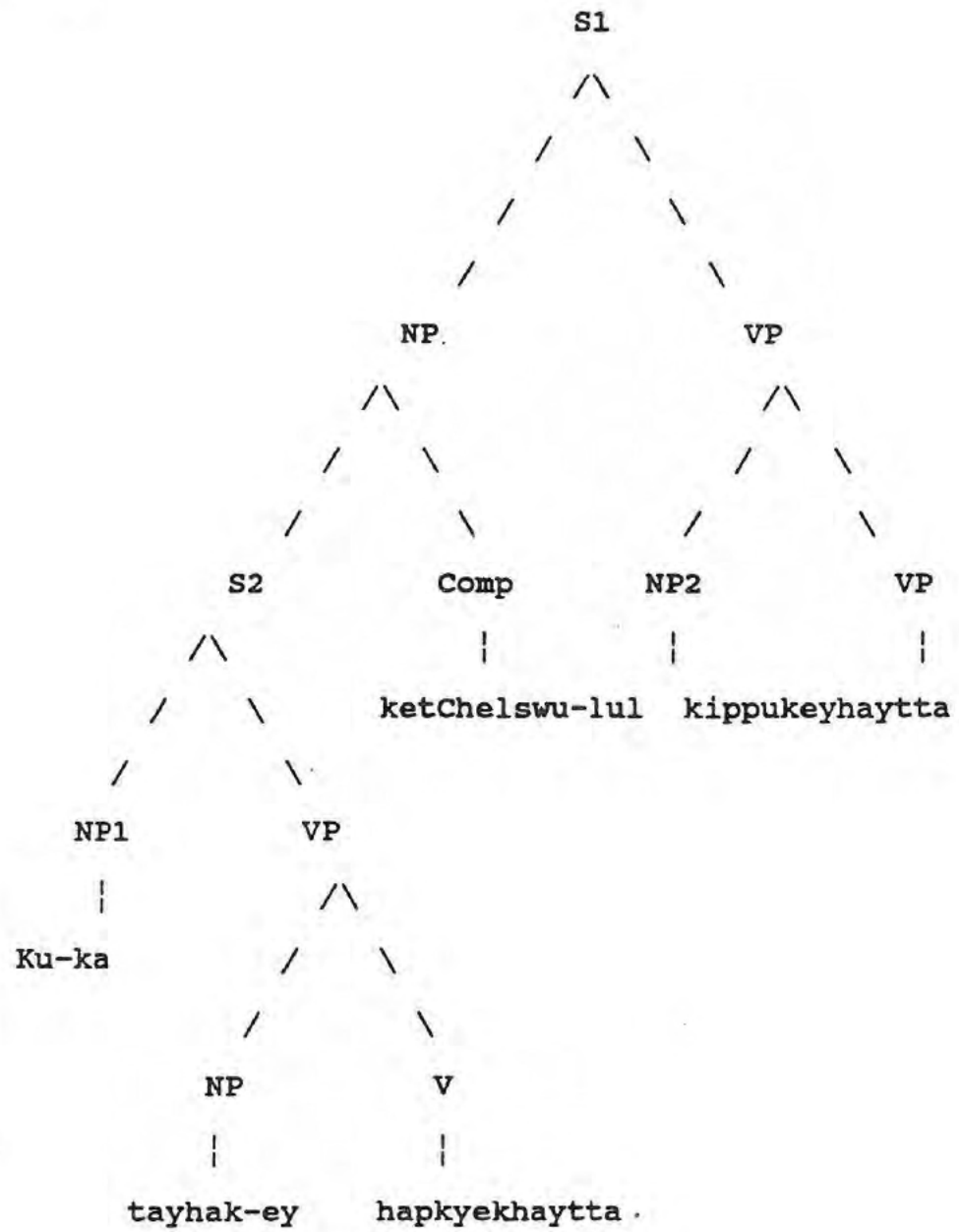
- (63) Chelswu_i-ka tayhak-ey hapkyekhan kesi $\left\{ \begin{array}{l} ?ku_i \text{ -lul} \\ *?\emptyset_i \\ ?caki_i \\ *kusalam_i \\ Chelswu_i \end{array} \right\}$
- kippukey haytta.

Notice that a subject complement is actually attached to the subject NP, which is dominated by S. Unlike the NPs in the object complement, however, the NPs within the subject complement do not have any c-command relation with any other NP outside that complement. Consider the following tree structure in (64).

As the diagram shows, NP1 does not c-command NP2 or vice versa. Therefore, condition (5) would apply to none of the sentences in (62) and (63), and coreference between NP1 and NP2 should be possible. Contrary to this prediction, however, coreferences in some of the sentences are not acceptable.

In the preceding discussion, object complements in (60) and (61) show that coreference between two NPs in the structure is not explained by the c-command condition because the two NPs are not in a minimal phrase. Furthermore, because NPs in subject complements in (62) and (63) do not have any c-command relation, the c-command condition would not apply to them. Thus, c-command condition is inadequate on the basis of syntactic structure to explain coreference relations in sentences with complement clauses.

(64)



For a better explanation, let us turn to our principles (25), (26), (33'), (34'), and (59). They are stated again here for ease of presentation.

- (25) The pronoun ku cannot be coreferential with its c-commanding subject in the minimal phrase.
- (26) Zero-anaphor must not be allowed in an argument NP position.
- (33') a. Subject
b. Verbal Complements
c. Non-argument NPs including genitives
- (34') A reflexive pronoun must be bound by an NP contained in a phrase which is higher or equal (in the hierarchy).
- (59) Full NPs can corefer with another full NP in an antecedent position freely.

First, take a look at ku. Since principle (25) requires minimal phrase, none of the coreferences between ku and another NP in (60) - (63) should be blocked by (25). However, their coreferences in (61) and (62) are not acceptable. Sentences such as (61) and (62) with ku can be accounted for in terms of backward anaphora. Backward anaphora will be discussed in a later section.

Among sentences with caki, no exception to the principles (33') and (34') is found. Thus they explain our examples fairly well.

Zero-anaphor is not acceptable in (63), because an argument NP of matrix verb cannot be omitted in a sentence.

Otherwise zero-anaphor could cause ambiguity for the identity of a referent. That is, since verbs like -kippukeyhatta 'make someone happy' always require an object, zero anaphor is not permissible in the object position as in (63). Although the subject and the object could be easily absent in a Korean sentence, it is only when they are understood by the context. Thus, at the sentence level, either NPs or anaphors should be present in argument NP positions, as principle (26) says.

As we mentioned before, kusalam is not possible in any of the above examples, because of its discoursal nature.

Finally, the full NP is commonly acceptable for anaphoric purposes in (60) - (63). The anaphoric full NP reduces the anaphoric ambiguity in a sentence which includes several different referents, as principle (59) says.

3.1.3.2. Relative clauses

Similar situations prevail with the relative construction.

Let us first consider the relative clause modifying an object NP. Since an object NP is dominated by VP, it is c-commanded by the matrix subject NP. Consider the following.

(65) Mochon_i-un... [{ ku_i
 Ø_i
 caki_i
 *kusalam_i
 Mochon_i } -lul nalwuthe-eyse
 DO ferry LO
 TO

censong-haye cwuten] catang-ul.....
 send-off give mother DO

chwumohayetta.
 cherish one's memory

(Hemwulepnuniwauy Tayhwa, p.233)

'Mochon cherishes (his) mother's memory who gave him a send-off at the ferry.'

- (66) $\left\{ \begin{array}{l} *Ku_i \\ *Ø_i \\ *Caki_i \\ *Kusalam_i \end{array} \right\} -un... [Mochon_i-lul nalwuthe-eyse$

censonghaye cwuten] catang-ul.....
 chwumohayetta.

- (67) Posthe-ssi_i-nun $\left[\begin{array}{l} ku_i \\ Ø_i \\ caki_i \\ *kusalam_i \\ Posthessi_i \end{array} \right\} \begin{array}{l} ka \\ SU \end{array} \text{ kyekkewatten]$
 Mr. Poster TO experienced

pwulman- ul epsaytta.
 dissatisfactionDO removed

(The Korea Times, Mar.1, '87)

'Mr. Poster removed dissatisfaction which he had gone through.'

- (68) $\left\{ \begin{array}{l} *Ku_i \\ *Ø_i \\ *Caki_i \\ *Kusalam_i \end{array} \right\} -nun [Posthe-ssi_i-ka kyekkewatten]$

pwulman-ul epsaytta.

The full NPs in (65) and (67) are reversed in (66) and (68), respectively. By the same token, the NPs are not in the minimal phrase, hence coreferences are not blocked by the c-command condition. However, we still find many

unacceptable cases. Such cases cannot be explained by the c-command condition.

Relative clauses modifying the subject behave a bit differently than the subject complement does. Observe the relative clauses which modify the subject.

- (69) [Wusong_i-i palphyohan] swuphilcip twuphyen-un
SU published anthology two TO

$\left\{ \begin{array}{l} \text{ku}_i \\ \text{?}\delta_i \\ \text{caki}_i \\ \text{*kusalam}_i \\ \text{Wusong}_i \end{array} \right\} \begin{array}{l} \text{-uy swuphilka-loseuy cipanul tacye} \\ \text{GE writer as foundation make} \end{array}$

noatta.
put

'The two anthologies which Wusong published laid a foundation for him (i.e., his life) as a writer.'

- (70) $\left[\left\{ \begin{array}{l} \text{Ku}_i \\ \delta_i \\ \text{Caki}_i \\ \text{*Kusalam}_i \end{array} \right\} \text{-ka palphyohan} \right] \text{swuphilcip}$

twuphyen-un Wusong_i-uy swuphilka-loseuy
cipanul tacye noatta.

- (71) [Centosa_i-ka mannan] salamtul-i hilnancolo
EvangelistSU met people SU blaming

$\left\{ \begin{array}{l} \text{ku}_i \\ \text{*}\delta_i \\ \text{?}\text{*caki}_i \\ \text{*kusalam}_i \\ \text{centosa}_i \end{array} \right\} \begin{array}{l} \text{-eykey toytolyecwun soli...} \\ \text{IO returning sound} \end{array}$

'The sound which the people whom the evangelist has met returned to him is...'

- (72) $\left[\begin{array}{c} ?*Ku_i \\ \emptyset_i \\ *caki_i \\ *kusalam_i \end{array} \right] -ka \text{ mannan] salamtul-i hilnancolo}$
centosa_i-eykey toytolyecwun soli...

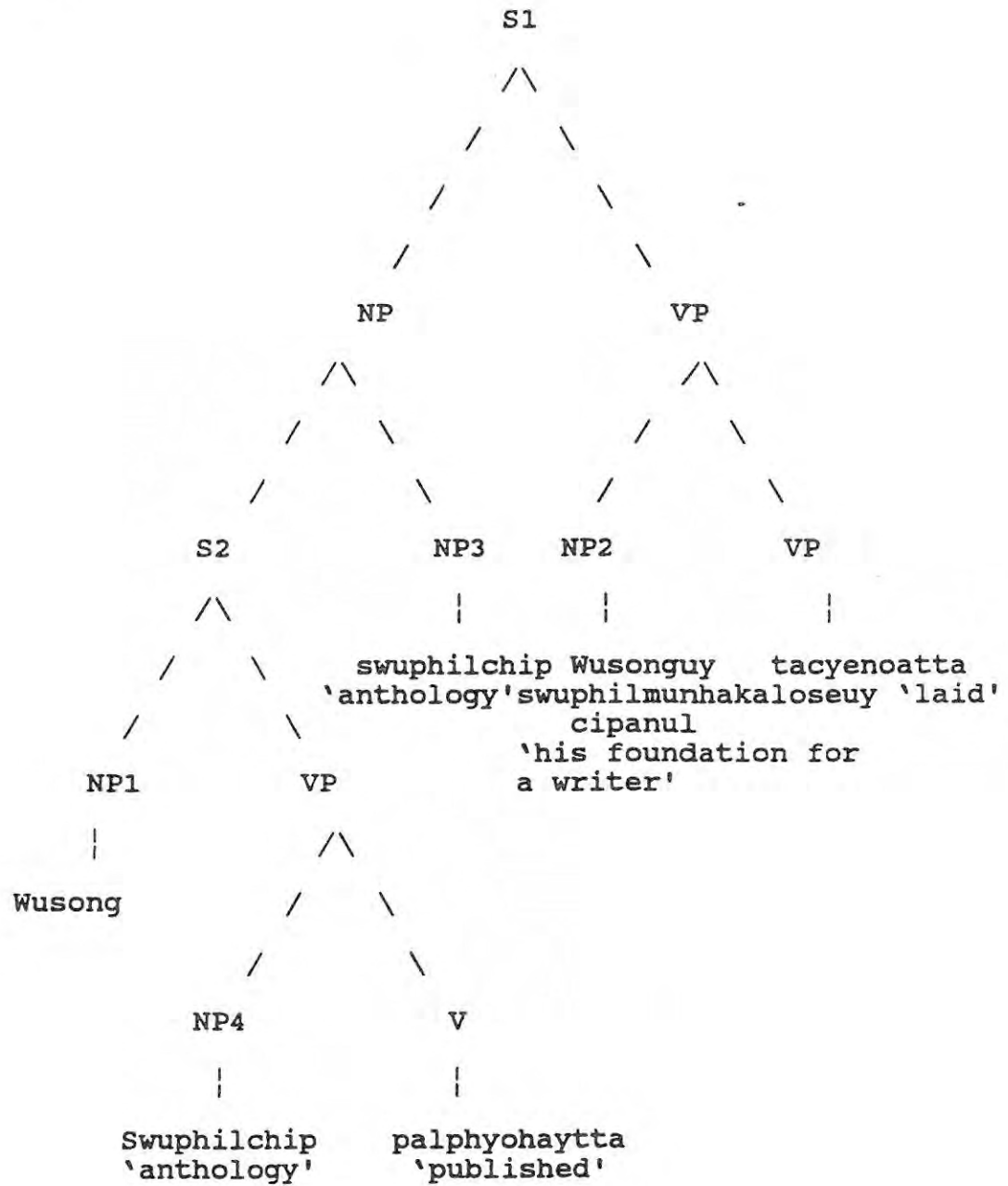
Again, the full NPs in (69) and (71) are reversed in (70) and (72), respectively. Given the c-command definition of domain, there is no case in the above examples where an NP in question is in c-command relation with any potentially coreferential anaphor. For a closer look, let us examine the tree structure in (73).

As the tree diagram shows, NP1 does not c-command NP2, or vice versa.¹¹ Hence the restriction on coreference does not apply to block coreference in these cases. Therefore, there is no syntactic reason in terms of c-command relation why some of the examples should be unacceptable in their coreferential interpretation. The fact that they are unacceptable must be accounted for in other ways.

Again, our principles work better here.

Consider zero-anaphors first. Note that zero-anaphor in an argument NP position (66, 68, and 71) is not acceptable, while it is acceptable in a non-argument NP positions (65, 67, 70, and 72). It is not clear why some speakers report that zero-anaphor in genitive position in (69) is doubtful at this point.

(73)



Coreferences with kusalam are not acceptable either, for the same reason mentioned before.

Now, let us examine ku and caki. Since principle (25) requires a minimal phrase, none of the coreferences in (a) sentences should be blocked by (25). Exceptions are (66a), (68a), and (72a). Among the examples with caki, only (72c) does not follow principles (33') and (34'). Notice that these exceptions are cases of backward anaphora which will be discussed in a later section.

From our discussions, it seems that the syntactic condition c-command applies only to some simple sentences and some sentences with PPs, but it does not apply to embedded sentential structures. Considering that most sentences in ordinary discourses are more complex than simple sentences, we feel that our principles (33') and (34') will naturally have a wider application than the c-command condition. It is also our belief that semantic or discoursal conditions should play a more important role in a grammar of anaphora than they have so far played.

3.1.4. Coordinate Structures

Coordinate structures have mostly been studied at the sentence-level. However, the structure itself is discoursal in nature, because it always consists of more than one simple or complex sentence. Therefore, there is no reason to expect the behavior of anaphora in coordinate structures to follow

that of anaphora within a simple sentence. Indeed, the problem of anaphoric reference in coordinate structures seems to parallel that of coreference "across sentences." Examples (74) and (75) provide coreference options in coordinate structures, while (76) and (77) are examples of coreference "across sentences."

- (74) Kimwuhyen-ssi_i-nun honsinuy cenglyek-ul keki-ey
Mr. Kimwuhyen TO whole passion DO there LO

kiwulye watko, tto keki-eyse ku_i-nun mwusanguy
devote come and there LO he TO unlimited

huyyel-kwa anwuy-lul etulswu issetta.
pleasure and comfort DO receive be

'Mr. Kimwuhyen_i devoted (his) whole passion to that area, and he_i has gotten unlimited pleasure and comfort from there.'

- (75)?Ku_i-nun honsinuy cenglyek-ul keki-ey kiwulye
wat ko, tto keki-eyse Kimwuhyen-ssi_i-nun
mwusanguy huyyel-kwa anwuy-lul etulswu
issetta.

The NPs in (74) and (75) clearly do not have any c-command relations. Consequently, the c-command restriction does not apply in such cases. In fact, however, the pronoun in (75) does not seem to be coreferential with the following NP within the sentence structure. Some may argue that coreference is possible here. This is so mainly because the first conjunct is pragmatically subordinated to the second.

The subject devotes his life to it (writing), and hence he receives pleasure and comfort from it.

Usually it is easy to get coreference if the first conjunct, where the anaphor occurs, is pragmatically subordinated to the second, where the full NP occurs. The same applies to English as well. Sentence (76) provides an example.

- (76) He_i hasn't contacted me, but I'm sure John_i is back.¹²

(Mittwoch, 1979)

The following coordinate sentences further support the idea that c-command is not relevant in such cases.

- (77) Chelswu_i-nun piano-lul chi-ko, ku_i-nun nolay-to
TO piano DO play and he TO son too

haytta.
do

'Chelswu plays the piano, and he sings (a song).'

- (78) *Ku_i-nun piano-lul chiko, Chelswu_i-nun
nolay-to haytta.¹³

Obviously, the coreference or non-coreference in (77) and (78) is determined mainly by anything but c-command. Even our principles do not work well in coordinate structures. This fact leads us to consider coordinate structure as belonging

to discourse. The discussion about coreferences in discourse, therefore, covers those in coordinate structures.

In discourse structures like (74) and (75), the coreferences between two NPs in separate sentences are determined according to the discourse context. In normal discourse, a new referent is first introduced by a name or by a description which enables the hearer to identify it. Then, this referent may be referred back to with an anaphoric form. It is this standard communication norm that explains the difficulty in obtaining coreference in (75). However, it is still possible to obtain coreference in such cases, because there are many other discourse factors that may contribute to anaphoric options, which may seem to behave randomly at first glance. Such discourse properties are discussed in Chapters Five and Six.

3.2. Backward Anaphora

Up to this point, we have focussed discussion on the principles (25), (26), (33'), (34'), and (59) which account for variety of examples quite well, though some of them are still to be explained. Among the latter are the ones below, where coreference is unacceptable between the indexed NPs.¹⁴

(79) *Nay-ka caki_i -lul John_i-eykey kewulo
 I SU kui DO IO mirror

pichwue poyecwuetta.
showed

'I showed self_i/him_i to John_i in the mirror.'

- (80) * Kui -nun "saynghwaluy palkyen"eyse
caki_i TO "Discovery of Life" LO

[Imssi-ka kitokkyo sincaka anilako]
SU Christian not

yekselhayessuna.....
claim

'He_i claims that Mr. Im_i is not a Christian in
(his book) "Discovery of Life".'

(Hemwulepnuniwaury Tayhwa, p.74)

- (81) * Ku_i -nun... [Mochon_i-lul nalwuthe-eyse
cakii DO ferry LO

censong-haye cwuten] catang-ul.....
send-off give mother DO

chwumohayetta.
cherish one's memory

'He_i cherishes (his) mother's memory who gave
him_i a send-off at the ferry.'

- (82) * [Ku_i -ka mannan] salamtul-i hilnancolo
caki_i met people SU blaming

centosa_i-eykey toytolyecwun soli...
evangelist IO returning sound

'The sound which the people who he_i has met
returned to the evangelist_i is...'

Though all these sentences contain backward anaphora and they are all unacceptable, it is hard to find a general principle to prevent such backward anaphora, because the following examples are still acceptable.¹⁵

- (83) [caki; -ka ssun] chayk-i] John-ul
ku; written book SU DO

kippukeyhayt-ta.
pleased

'The book that self wrote pleased John.'

- (84) Ku;-uy 50tay choey Phichentukssi;-nun Sanho-wa
he GE fifties initial Mr. Phi TO Coral-and

Cincwulanun phyoceylo simwunsencipul
Pearl titled anthology of poetry

kanhaynghaytta.
published

(Hemwulepnuniwaury Tayhwa, p.181)

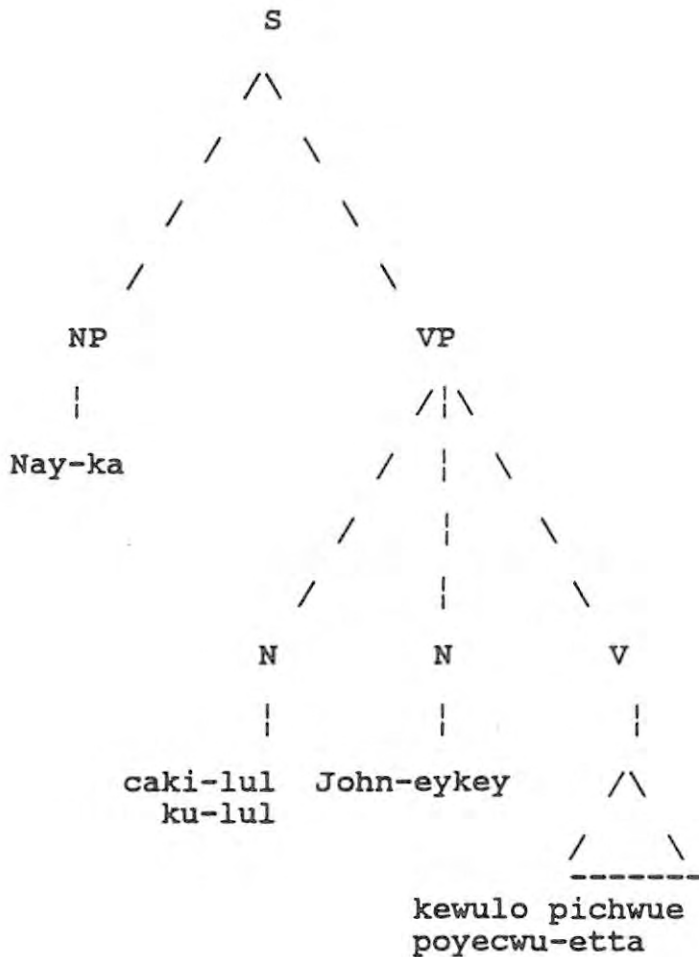
'In his, early 50's, Mr. Phichentuk, published
his anthology titled "Coral and Pearl".'

Since O'Grady's proposal for such situations seems to be quite plausible, we follow his Precedence Constraint for the time being:

- (85) O'Grady's Precedence Constraint: A pronoun cannot precede an antecedent in its phrasal category.

Here, the phrasal category is the smallest maximal phrasal projection (S, NP, VP) which contains it. Look at the tree diagram of (79) represented in (86) first:

(86)

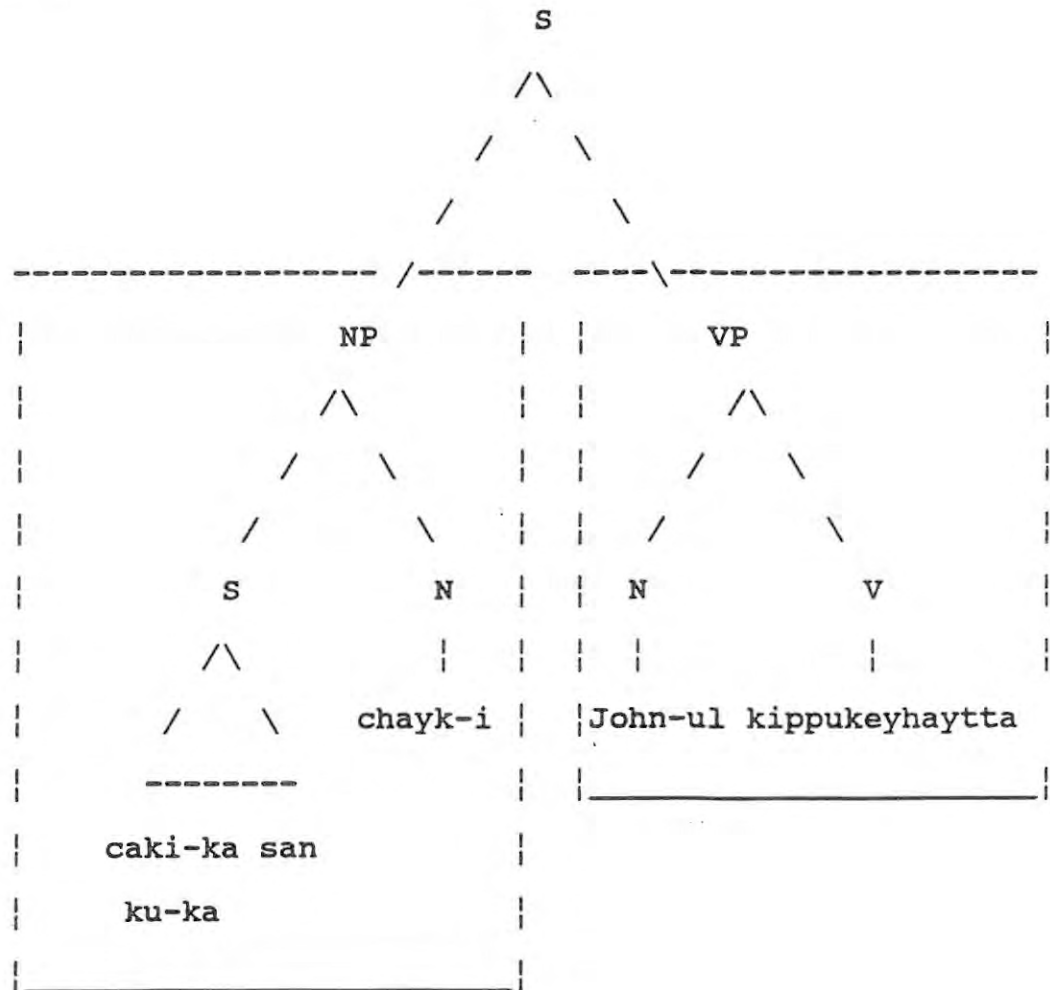


According to the principle, since caki and ku cannot precede John, (79) is not acceptable. If the two objects are reversed caki and ku can be coreferential with John as in (87).

(87) Nay-ka John_i-eykey { caki_i } -lul kewulo
 { ku_i }
pichwue-poyecwuettta.

By the same token, caki and ku can corefer with John in (83), because John, the antecedent, lies outside the phrasal category of the anaphor. This is represented graphically as in (88).¹⁶

(88)



Although the antecedents in (80), (81), and (82) are all outside the phrasal category of the anaphor, their

coreferences are still not acceptable. Thus, O'Grady's precedence constraint does not cover these cases.

3.3. Some Concluding Remarks

So far, our discussion has shown that the c-command relation between NPs affects the anaphora option in a quite inconsistent way, though we have found that it works well in a simple sentence. We have also found that not all the anaphoric forms behave the same way.

There are reasons why the anaphoric forms behave differently. First, since the c-command condition is effective only to a certain extent, we have assumed that there are other syntactic factors that may interact with each other to restrict the occurrences of each anaphoric form. Second, we have also assumed that there are some semantic factors which may work together with the syntactic factors. Third, it seems that there are some discoursal factors, both structural and cognitive in nature, which may further restrict the effect of syntactic or semantic factors. The latter two are to be discussed in the following chapters. Now, we will review what other syntactic factors may also affect anaphoric interpretation of NPs.

3.3.1. Subject and Caki

Some linguists have suggested that grammatical positions, especially the subject position, may be relevant to

coreferential interpretation. Among all the anaphoric forms we have discussed, caki seems to have certain tendency to corefer with the subject. For example:

- (89) Chohi_i-nun kewul sok { caki_i -uy elkwul-ul
TO mirror inside { Ø_i face DO
ku_i
*kusalam_i
Chohi_i }

palapoatta.
watched

'Chohi_i watched her_i face inside the mirror.'

- (90) Joe_i-ka Chelswu_j-eykey { Ø_{i/j} -ka
SU { ku_{i/j} SU
caki_{i/*j}
*kusalam_{i/j}
Joe_i/Chelswu_j }

sonswuken-ul ttelettuliettako malhaytta.
handkerchief DO dropped said

'Joe told Chelswu that he dropped a handkerchief.'

- (91) { Ku_{i/j} -ka } tayhak-ey hapkyekhan kesul
{ Ø_{i/j} college IO be admitted comp
caki_{i/*j}
*kusalam_{i/j}
Chelswu_i/Joe_j }

Chelswu_i-nun Joe_j-eykey alliecuetta.
TO IO noticed

'Chelswu lets Joe know that he is admitted to a college.'

In (89), ku and zero-anaphor may refer to the subject Chohi as caki does, because there is no other possible antecedent in the sentence. For some native speakers, the coreference between Chohi and ku/0 is questionable, because they might

imagine a coreference to someone outside the sentence. Even if we restrict our attention to a single sentence, the pronoun ku and zero-anaphor seem to have weaker anaphoric relations with the subject than caki does in (89) and (90), where two human NPs are present. That is, while the zero-anaphor and ku may refer to either Joe or Chelswu, caki can refer to no other than the subject Joe. However, as principles (33') and (34') show, when the subject is not a third person NP with a human referent, caki can corefer with any other NP for its interpretation according to the hierarchy. This has to do with what Kuno (1976) calls "speaker's empathy" or "speaker's point of view," which is a pragmatic factor. Or, as Lee (1973) explains, because of caki's inherent nature of emphasis, its appearance shows that its referent is aware of the action of the verb. So when the subject is not a third person NP, caki corefers with any other NP according to the hierarchy in (33'). Therefore, what is noted here is that caki's tendency to corefer with the subject, though syntactically stated, is actually conditioned by both semantic content and its pragmatic function.

3.3.2. Kusalam and Its Nonsyntactic Nature

We have not discussed kusalam in the previous sections, though we have noticed that most of the examples with kusalam are unacceptable. Note that kusalam in the above three

sentences, (89) - (91), may not be coreferential with any NP within the sentences. Or, if anyone accepts those sentences with kusalam, they sound at best awkward to him. Moreover, in our examples in this chapter there have been no grammatical sentences which allow kusalam to be coreferential with any NP within the sentence boundary. In fact, we have found none. The examples from real conversations illustrated in (3) of Chapter One support the idea that kusalam is used naturally for coreference across sentence boundaries, but not within a single sentence.¹⁷ Therefore, it is appropriate to call kusalam a discoursal anaphoric form. This is why previous studies on anaphora, which are mainly restricted to the sentence, all left kusalam out.

3.3.3. Zero-Anaphora and Necessary Subject and Object

When the verb in a sentence must carry two arguments, i.e., subject and object, the two NPs cannot be null unless they are deducible from the context or preceding discourse. The following example illustrates such a point.

- (92) CIA kukcang maykon_i-un cukkak
 director Macon TO immediately
- | | | |
|---|--|------------|
| { | *Ø _i
*ku _i
caki _i
*kusalam _i
maykon _i | -lul
DO |
|---|--|------------|

cicihaytta.
 supported

'CIA director Macon_i supported him(self)_i.'

In (92), whether or not the anaphoric forms can be coreferential with the subject, the verb, cicihata 'support,' necessarily requires a subject and a direct object. If the object is null or a zero-anaphor, the sentence would be incomplete. Hence, for a transitive verb requiring two arguments, a zero-anaphor cannot be used in the object position. It is also true that a zero-anaphor cannot replace the subject, when a single sentence is under consideration. Some of the previous examples provide clear evidence for it, as in (66), (68), and (71).

On the other hand, zero anaphora in either the subject or the object position is common in Korean discourse. Observe the following.

- (93) Taythonlyeng_i-un caki_i-uy uykyen-ul
 president TO GE opinion DO

paphyohaytta.
 announced

CIA kukcang Maykon_j-un cukkak Ø_i
 direct TO immediately

cicihaytko,
 supported
 hanphyenulonun Ø_j kwukhoy_k-lul pinanhaytta.
 on the other hand congress DO blamed

'The President_i announced self_i's(his) opinion.
 CIA direct Macon_j supported Ø_i (him)
 immediately, while (he)_i blamed the congress_k.'

Again, syntax does not offer any account for the coreference of the zero anaphor with Taythonlyeng in (93), nor does it stipulate when or why a zero anaphor is used.

3.4. Summary

In this chapter some syntactic conditions of Korean anaphora are discussed with various sentential examples mostly excerpted from natural discourses. In our discussion, possible discursal effects are disregarded for the time being in order to isolate syntactic factors within the sentence boundary.

It is discovered that the c-command constraint, while accounting for cases in a limited environment, does not seem to be adequate to apply to all those different third-person anaphoric forms. Anaphora selections seem to be rather controlled by some other syntactic factors, as well as certain semantic and discursal factors. Those other syntactic factors may interact with the c-command relation to demand certain specific anaphoric forms.

As a result of our investigation, several principles have been proposed for the anaphoric forms.

- A. The pronoun ku cannot be coreferential with the c-commanding subject of its minimal phrase. (25)
- B. Zero-anaphor must not be allowed in an argument NP position. (26)
- C. A reflexive pronoun must be coreferential with an NP contained in a phrase which is higher than or equal to the phrase that contains the reflexive pronoun in the following hierarchy:

Subject > verbal complement > non-argument NPs
including Genitives (> implies "higher than")
(33') and (34')

D. Full NPs can corefer with another full NP in an
antecedent position freely. (59)

E. Kusalam is a discoursal anaphor.

Notes

1. See Wasow (1986, Ch.1) about the issue of grammaticality and dialects.

2. Like English, Korean is a right branching language. There is, however, a difference in the linear order of VP structure, i.e., VP -> V + NP for English, whereas VP -> NP + V in Korean.

3. It is originally introduced in Chomsky (1973) and mentioned in Reinhart (1983).

4. The asterisk * represents that the coreference of identically indexed NPs are not acceptable in the sentence. But such sentences may be acceptable with two non-coreferential NPs.

The unacceptability of coreference is tested by asking 13 native speakers whether the coreference in a sentence is acceptable to them. The asterisk * is marked when all 13 native speakers agreed to the unacceptability of coreference.

5. Some Korean speakers noted that caki refers to Harry only, while ku refers to John. Still, in such cases, caki does not exactly correspond to the English reflexives. Moreover, ku does not exactly correspond to the English pronouns him/her, either.

6. The question mark ? here represents that the coreference of identically indexed NPs are questionable in the sentence, though some speakers find it possible. But still many speakers accepted that the coreference is possible. That is, whenever any speaker, more than one among thirteen native speakers I have polled does not accept the coreference which was asked, the question mark ? is presented.

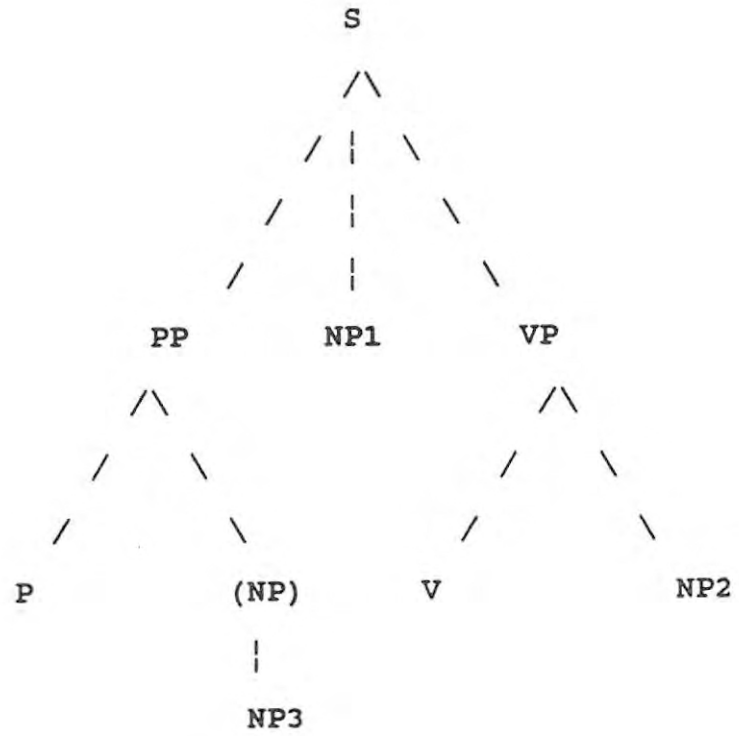
7. We regard "minimal phrase" as consisting of only the subject, the verb, and the object(s).

8. Both question mark and asterisk ?* show that the coreference of the examples is not accepted by all thirteen Korean speakers asked, though some of the relevant literature regards this coreference as acceptable. See example (36') and (39') in the main text.

9. The term "postposition" is usually used for Korean particles which work as English prepositions but follow NP's. Therefore, PP is used to indicate postpositional phrases as well as prepositional phrases.

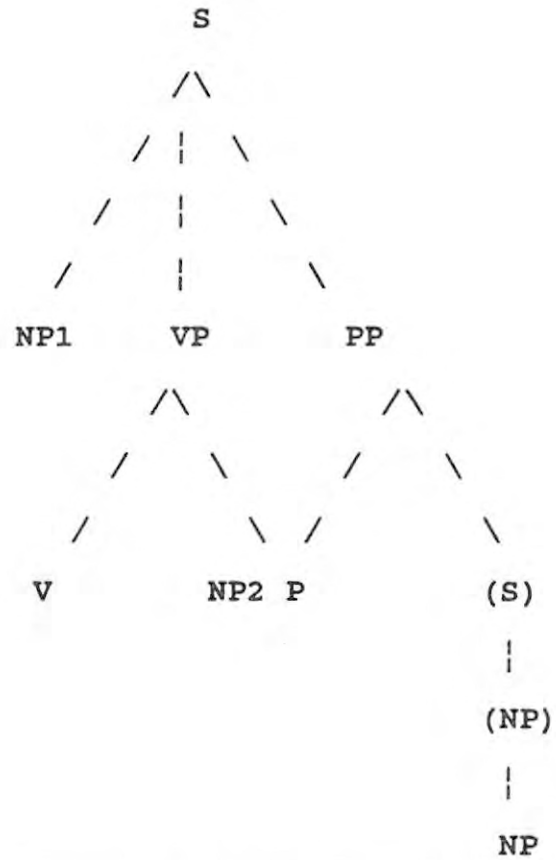
10. Reinhart's original trees for structures with PPs as in (44a) are illustrated on the basis of English structure as follows. (Reinhart 1983:43)

(R41)



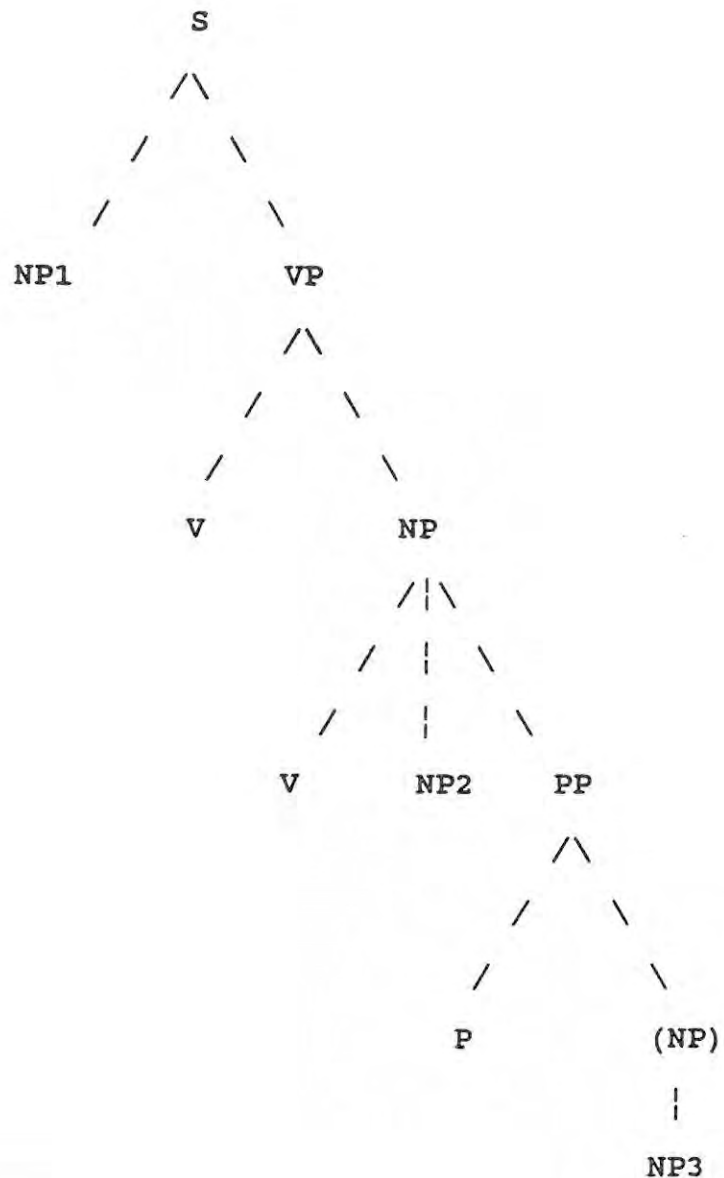
Or

(R42)



Again, Reinhart's original tree for (44b) is as follows
(1983:46)

(R44b)



11. Since only NP1 and NP2 are human NPs, they are the target of our discussion here.

12. However, Chu points out in a personal communication that he and John still tend not to corefer, though coreference is possible.

13. Chu points out that the connective ending -ko may be something worthwhile to look at for anaphoric options. In fact, the meaning and the status of -ko is different from and

in English, in that it has some effects on the semantic coherence of coordinate structures. Besides, Korean has a number of such connective endings, which have various meaning differences. Such meaning differences affect the hearer's interpretation of the discourse greatly. They can also affect the anaphoric option within the discourse. This fact will be discussed with regard to pragmatic inferences in Chapter Six. Those connectives may be translated into some connective adverbs in English, though many of them are hard to translate.

14. We are not worried about zero-anaphor, kusalam and the full NP here, because, in any case, their backward anaphora are explained within our framework.

15. The caki's in (80) and (81) do not follow principles (33') and (34') either. Hence they are unacceptable.

16. See O'Grady (1987) for more details about backward anaphora in Korean, which includes discontinuous constituents.

17. It seems that kusalam's tendency to refer to an antecedent beyond the sentence is due to its deictic nature. That is, the demonstrative ku in kusalam is originally one of the three deictic demonstratives in Korean. Ku points to "something over there" which is neither close to the speaker nor to the hearer.

CHAPTER FOUR SEMANTIC CONDITIONS

We have so far examined the syntactic properties which restrict anaphora options. The interpretation of some of the data given in the previous chapter might appear questionable because native speakers may have adduced their own semantic considerations. In fact, some semantic properties within the sentence boundary could even more effectively restrict the anaphora options than some syntactic properties do.

What we will examine in this chapter is how the interpretation of NP anaphora is arrived at partly through semantic properties of the anaphoric forms and their antecedents.

4.1. Humanness and Animateness

The consideration of the semantic features "humanness" and "animateness" for anaphoric forms is a logical further step in our study. Notice that some of these anaphoric forms can be coreferential with both human and non-human NPs, while some of them can only be coreferential with human NPs.¹ For instance, caki can be coreferential with both, but ku and

kusalam only with human NPs. The following sentences show the possibility and impossibility of coreference between anaphoric forms and human/inanimate referents.

- (1) Chohi_i -nun kewul sok { caki_i -uy
TO mirror inside Ø_i GE
ku(nye)_i
*kusalam_i
Chohi

elkwul-ul palapoatta.kusalam_i-nun ...
face DO watch TO

meli-lul sonpatak-ulo ssulepomye
taymwun-kkeylo hair DO pawn with pat
gate around
kwi-lul kiwulyetta.
ear DO lean

(Shintonga, 3, 81, p. 442)

'Chohi, watched her, face inside the mirror. The woman, was paying attention to the door, touching her hair with her hand.'

- (2) Kosumtochi_i-to² { caki_i } saykki-nun
porcupine TO { s_i }
 { ku_i } young TO
 { *kusalam
 kosumtochi }

hamhamhatako hanta. (Korean proverb)
velvety do

'Even a porcupine, would say its, young is are velvety.'

- (3) Kay_i-ka { caki_i } kkoli-lul mwulyeko hanta.
dog SU { ~~ø_i~~ } tail DO try to bite do
 { ?ku_i }
 *kusalam_i
 kay_i

'A dog, is trying to bite his own tail.'

- (4) Swup_i twuy-eynun kkoy nopun tolsan-i issese
 forest back LO quite high rock-mountain present

enceyna cithun umyeng-ul	$\left\{ \begin{array}{l} \text{swup}_i \\ \emptyset_i \\ *ku_i \\ *caki_i \\ *kusalam_i \end{array} \right\}$	-uy
always dark shadow DO		GE

wuy-ey tuliwetta.
 over LO drop

(Sintonga, 3,81)

'Because of the presence of the quite high rock-mountain behind the forest_i, a dark shadow falls on the forest_i all the time.'

A repeated NP coreferring with an identical NP, a fact which is not very common in English, is often found in Korean sentences. In all of the above examples, repeated NPs are coreferential with their corresponding identical NPs, no matter whether they are animate, inanimate, human, or non-human. Another anaphoric form which can be coreferential with any kind of NP is the zero-anaphor. This is probably because of its inherent nature. That is, zero anaphora does not have any grammatical shape or semantic attenuation, hence this null form allows the widest range of coreferentiality.

Caki can be coreferential with a non-human animate NP as in (2) and (3) as well as with a human NP, as in (1), but not with an inanimate NP as in (4). The pronoun ku and the definite NP kusalam, on the other hand are most restricted: they can only be coreferential with human NPs, though they are constrained differently. Thus, while ku and kusalam are possible only in example (1), where the antecedent is a human

NP, ku and its antecedent may occur in the same sentence but kusalam and its antecedent must occur across a sentence boundary.³ Hence, the coreference possibility to a human/animate referent for each anaphoric form can be expressed in an implicational hierarchy as follows.

+Human +Animate	>	+Human +Animate	>	+Human <u>+Animate</u>
ku kusalam		caki		Ø full noun phrase

Nevertheless, some might argue that the use of ku in (3) refer to kay 'dog' is quite acceptable. Or some poetic writer would use ku in (4) to refer to the subject swup 'forest.' This is what Li (1985:102) calls a "personified" antecedent. That is, one of the conditions under which an otherwise human pronoun may take a non-human antecedent is when the antecedent is personified or regarded by the speaker as having acquired some human qualities in some way. Thus, such use of ku is frequently found in children's fables, where animals behave like human beings.

It seems that such uses of a pronoun to refer to a personified antecedent may be universal. Compare the following examples.

- (5) Bei-feng kanjian nei zoudaor-de-ren ba paozi
 north-wind see that traveler BA cloak

tuo-le, ta jiu zhidao ta shu-le gei
take-off-PERF he then know he lose-PERF to

taiyang le.
sun PART

'When the north wind saw the traveler take off
his cloak, he knew that he had lost to the
sun.'

(Li 1985:101)

- (6) "Number 5" is a secret weapon created by Steve
Guttenberg. When it ... or maybe he... escapes
the military compound,.... Programming himself
with an overdose of television, number 5 is
almost, but not quite, human.

(Jones Intercable Magazine, 5/87:6A)

- (7) Hulk_i-un cimsuuley-eyse naylyecica, Ø_i etten
dirt TO cart LO unload certain

thong-ey tamkyetssumnita. ... Ø_i etten
bowl LO be put in certain

koylowum-ilato kuce nwun ttak kamko cikusi
suffering SP just eye hard close smoothly

kyentikimanhamyen, nacwungeynun nolawulmankhum
stand afterward surprising much

polami issul kesilako ku_i-nun mitetta. ...
reward be thing TO believe

Hulk_i-un caki_i-lul mantun salam-lul
dirt TO DO made person DO

wenmanghayessuminta. ...
grumble

(Kwuke 4-2:144-5)

'After the dirt_i was unloaded from the
cart, (he_i) was put in a big bowl. ... He_i
believed that there would be a surprising
reward later, if (he_i) could stand any suffering
smoothly. The dirt_i grumbled about the person
who has made self_i (into a pot).'

In (5), a Chinese example, bei-feng 'north wind' is personified and treated as possessing all human qualities, thus the pronoun ta usually reserved for humans is used twice as the anaphoric form for it. The English example from a TV magazine in (6) indicates a very interesting switch from the non-human pronoun it to the human one he. Since the antecedent, Number 5, is a robot, the writer first uses it as the pronoun, but he switches to he to show that number 5 is almost human. Hence the writer regards the robot as a personified referent. Similarly, the Korean example in (7) shows that the pronoun ku refers to a non-human inanimate antecedent, i.e., hulk 'dirt.' The example is an excerpt from a text which talks about the life of a pile of dirt. Since the dirt thinks, speaks, thanks, believes, etc., through the whole text, we easily recognize that the dirt is "personified." Still other anaphors, i.e., zero-anaphor, caki, and the noun, are also used to refer to the antecedent hulk 'dirt.' Such personified antecedents possess humanness, just as any human noun does.

4.2. Non-Referentiality

Basically and by definition, anaphoric forms must refer to something--a referent or a linguistic form. However, some anaphoric forms do not refer to a specific noun. In such cases, the speaker does not use them for any specific reference, but for generic or random reference. In generic

reference, the NP refers to all members of a class as if they were identical; while in random reference, it refers to any member of a class. (cf. Chu 1983:137)

4.2.1. Generic Reference

Korean, like many other languages, communicates generic reference with an unmarked noun phrase or pronoun, such as salam(tul) 'person (people),' wuli 'we,' etc., morphologically undistinguished from other kinds of reference as in (8) and (9).⁴ The generic interpretation of such NPs is therefore completely determined by the interpretation of the whole sentence or even a larger context.

- (8) Salam_i-un [Ø_i Swuyenghaki ceney] pantusi
 people TO swim before certainly

cwunpiwuntong-ul hayyahanta.
 warming up DO should

'People_i have to warm up before they_i go swimming.'

- (9) Wuli_i-nun [Ø_i Swuyenghaki ceney] pantusi
 we TO swim before certainly

cwunpiwuntong-ul hayyahanta.
 warming up DO should

'We_i have to warm up before we_i go swimming.'

In (8) and (9) "people" and "we" serve as the antecedents in the anaphora of generic reference, and zero-anaphor in the following example does so too:

- (10) Ø_i [Ø_i Swuyenghaki ceney] pantusi
 swim before certainly

cwunpiwuntong-ul hayyahanta.

warming up DO should

'(People/We)_i have to warm up before (they/we)_i
 go swimming.'

Although there is no overt NP preceding "get warmed up" and "swim," the verbs evoke a situation where an agent noun is expected. Unlike English, such agentless sentences with generic reference are accepted in Korean. Chen (1984) and Li (1985) also note that in Chinese a generic noun referring to mankind may also be coded as zero.

- (11) Ø youyong yigian Ø yiban yao xian
 swim before generally ought first

zuo zhunbei huodong.
 do preparation activity.

'Usually (you) should get warmed up before
 (you) go swimming.'

(Chen 1984:21)

- (12) Ø bu jing yi shi, Ø bu zhang yi
 not experience one affair not gain one

zhi.
 wisdom

'People do not gain wisdom without
 experience.'

(Li 1985:121)

Thus, an anaphoric form may corefer with its antecedent, which is non-referential, such as in its generic sense.

However, only the zero anaphor can take a non-referential antecedent, as is shown in examples (13) - (15):

- (13) Salam_i-un [{ θ_i } ka Swuyenghaki ceney]
 people TO { *ku_i swim before
 *caki_i
 *kusalam_i
 *salam_i }

pantusi cwunpiwuntong-ul hayyahanta.
certainly warming up DO should

'People, have to warm up before they, go swimming.'

- (14) \mathcal{O}_i swuyenghaki ceney \mathcal{O}_i pantusi
cwunpiwuntong-ul hayyahanta.
- (15) [\mathcal{O}_i Swuyenghaki ceney] salam_i-un pantusi
cwunpiwuntong-ul hayyahanta.

The reason for its ability to do so is obvious. Since the other anaphoric forms, i.e., ku, caki, and kusalam, are definite by nature, they cannot be used for generic reference. By the same token, only the zero-anaphor can serve as a non-referential antecedent for another zero-anaphor, as in (14). Thus, the zero anaphor seems to be the most flexible for either generic or non-generic NP.

There is however, a residual problem. Note that in (16), unlike the above examples, definite anaphoric forms such as ku, caki, and kusalam are allowed to corefer with the generic NP antecedent.

- (16) Salam_i-un { \emptyset_i } -uy elkwul-ey { \emptyset_i }
 people TO { ku_i } face LO { ku_i }
 { caki_i }
 { kusalam_i }
 { ?salam_i }

-uy sengcil-i nathananta.
 GE character SU appear

'For a person, his character appears on his face.'

This might to be due to the grammatical functions that the anaphors perform. In (16), the grammatical function for the anaphoric forms is genitive, while the anaphors in (13), (14), and (15) are used as subjects. In the following are further examples with the genitive anaphors referring to generic NPs.

- (17) { Salam_i-un { \emptyset_i } -uy pwumonim-ul
 { \emptyset_i } TO { ku_i } GE parents DO
 { caki_i }
 { kusalam_i }
 { ?salam_i }

kongkyenghayyahanta.
 respect

'People_i should respect their_i parents.'

- (18) Cakolo { Salam_i-un { \emptyset_i } -uy ip-ul
 from old era { \emptyset_i } TO { ku_i } GE mouth DO
 { caki_i }
 { kusalam_i }
 { ?salam_i }

cosimhayyahanta.
 be careful

'From the ancient time, people should use their mouths with care.'

At this stage, it is not clear why the grammatical functions should have this effect on the interpretation of anaphoric forms for generic reference.

From the above discussions we may arrive at this conclusion: the zero anaphor and a noun can be used to corefer with a generic expression. Caki, ku, and kussalam are allowed for generic coreference only in the genitive position.

4.2.2. Random Reference

A few nouns such as nwuku and amwu, are used to encode random reference. Compare the following examples.

- (19) Nwukwu-tunci [Ø swyenghaki ceney]
 anyone SP swim before
 pantusi cwunpiwuntong-ul hayyahanta.
 certainly warming up DO should
 'Anyone should get warmed up before he goes
 swimming.'
- (20) Amwu-lato [Ø swyenghaki ceney]
 anyone SP swim before
 pantusi cwunpiwuntong-ul hayyahanta.
 certainly warming up DO should
 'Anyone should get warmed up before he goes
 swimming.'
- (21) Ø [Ø swyenghaki ceney] pantusi
 swim before certainly
 cwunpiwuntong-ul hayyahanta.
 warming up DO should
 'Anyone(whoever he is) should get warmed up
 before he goes swimming.'

Notice that (21), having all referents realized in terms of zero-anaphor, is quite acceptable for random reference as well as for generic reference, which is illustrated in (10). In addition to the nouns such as nwukwu and amwu, salam, which is a generic NP, can also be used for random reference. Unlike generic NPs, salam as a random NP is usually marked by a following numeral hana 'one' or other preceding modifiers (e.g., etten 'certain') though sometimes not so marked. Its anaphors show characteristics similar to those with generic reference. Consider the following examples.

- (22) etten salam_i-i { \mathcal{S}_i } -ka/i hanun
 some person SU { ku_i } SU do
 caki_i
 *ku salam_i
 *salam_i

il-ey pwulphyeng-man hantako hapsita.
 work LO complain-only do suppose

'Suppose that a person_i just complains about
 the work which he_i is doing.'

- (23) etten notonca_i-ka { \mathcal{S}_i } -uy il-ey
 certain worker SU { ku_i } GE work LO
 caki_i
 *ku salam_i
 *salam_i

pwulphyeng-man hantako hapsita.
 complain-only do suppose

'Suppose that a worker_i just complains about
 his_i work.'

- (24) Salam_i hana kuliko nase { \mathcal{S}_i } uy
 person one draw after { ku_i } GE
 *caki_i
 kusalam
 *salam

meli-ey mocato kulyela
 head LO hat draw

'Draw a person_i, and then draw a hat on his_i head.'

In (22) and (23), the referent for salam is random, and the following anaphors corefer with their antecedent salam. The random noun phrase etten salam 'some person' refers to any member of the class "person," while the anaphor corefers with the antecedent, the random noun phrase etten salam.

Although in each case in (22) and (23), the first and the second NPs are coreferential, they do not necessarily refer to the same entity because their reference is random, i.e., referring to any one member of a set. The set, however, has to be the same in each case. Kusalam 'that person' and salam on the other hand, are not allowed to corefer with a random antecedent. Kusalam, again, seems to refer to someone beyond the sentence boundary. Example (24) shows that in a coordinate structure, where the two clauses exhibit discourse relations more than grammatical relations between them, kusalam can corefer with the NP which has random reference in the first clause. On the other hand, the single noun salam may not do so because the referent has actually become definite after it is introduced. That is, a random NP introduces a random referent; but when the same referent is referred to the second time by an anaphor, it is no longer random. It has become definite or at least specific.

Thus, some of the anaphors referring to a random NP behave like definite anaphors, because their referents, have actually become definite after they are introduced. It is for this reason that ku, caki, and the zero anaphor can be coreferential with the random NP antecedent.

In some discourses, however, a random referent could remain random after it is introduced. Observe the following example.

- (25) A. Na-nun notongca, hana kwuhako siphuntey.
 I TO worker one hire want
 'I want to hire a worker_i.'
- B. Na-to { \emptyset_i } -lul kwuhako siphta.
 I SP { *ku_i } DO hire want
 { *caki_i }
 { *kusalam_i }
 { notongca_i }
- 'I also want to hire a worker/one_i.'

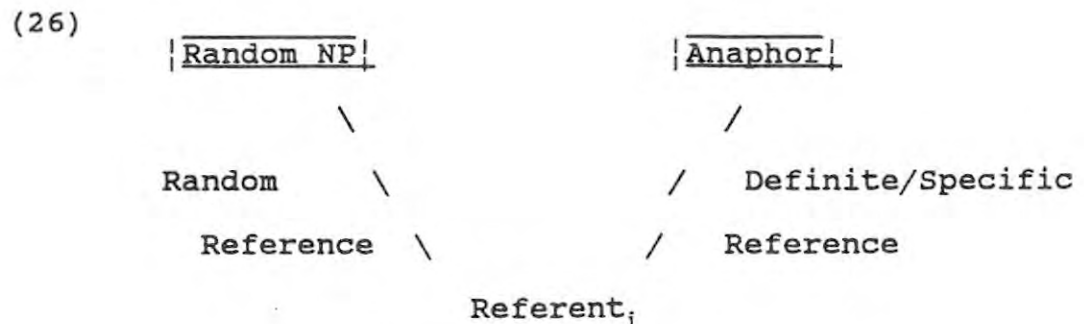
The random NP notongca hana 'a worker' is first introduced into the discourse by Speaker A and it remains random in Speaker B's speech with the meaning of 'any worker.' None of the definite anaphors, ku, caki, and kusalam are acceptable here, because of this random reference, which can be encoded by zero or the NP notongca. Furthermore, only the numeral, hana, can be present in B's speech with the head noun left out, as shown in (25') below.

(25') B. Na-to hana kwuhako siphta.
 I SP one hire want

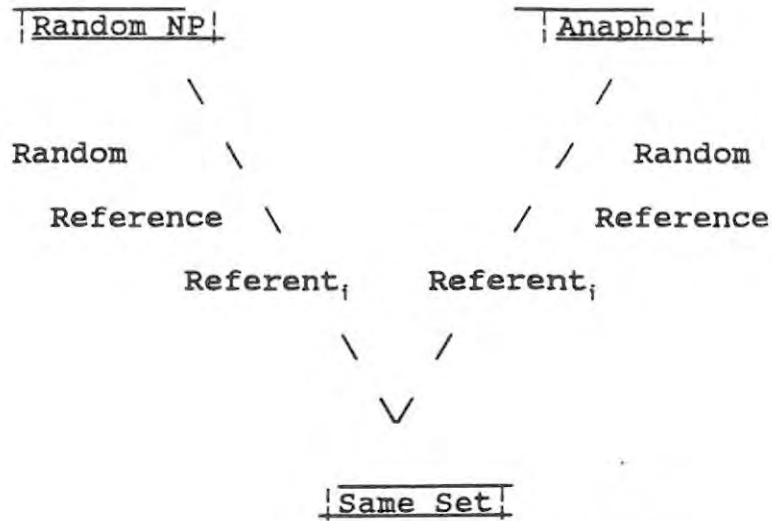
'I also want to hire one.'

This fact is paralleled in English by the use of the indefinite pronoun one. In fact, of course, Speaker A and B in (25) are using the same linguistic form notongca to refer to a random member of the same set "worker."

Therefore, the random reference relationships among referents, NPs, and anaphors can be described in the following two ways.



(27)



Here (26) applies to (19) through (24), and (27) illustrates the case of (25).

In general, random reference may be encoded by a noun phrase or zero-anaphor followed/preceded by different markers such as numerals or modifiers. Zero-anaphor is utilized only when prior mention is present. Sometimes only the numeral without the random head noun could encode random reference. Whenever a random referent is established as particular entity, e.g., after a figure is drawn in (24), then definite anaphors, ku, caki, or kusalam can be used later to refer to it.

Having discussed the generic and random reference at some length, we now arrive at the conclusion that both can be encoded in a full noun phrase or a zero-anaphor. When a zero-anaphor is utilized for random reference, prior mention of the random referent must be present in the discourse. All

other anaphors are restricted in use for generic or random reference except some cases: for generic coreference, definite anaphors can occur only in the genitive position. For random coreference, definite anaphors can be used only where the referent has become definite.

4.3.Indefiniteness and Quantifiers

In the previous chapter, we have discussed anaphora options of definite NPs only, and ignored cases with indefinite or quantified NPs in the examples. This was necessary because the structural conditions we discussed are not sufficient to handle all anaphora facts of indefinite or quantified NPs, which seem to require semantic explanations.

4.3.1. Coreference with Indefinite NPs

In Korean, indefinite referents are usually expressed by special nouns such as amwu and nwukwu. Although these two nouns are used to encode random reference, they also represent indefinite referents when used with different particles.⁶ Despite their status as nominals, their coreferential relationship with some anaphors cannot be stated in terms of syntactic conditions.

Compare the following sentences.

- (28) Chelswu_i-nun chayksang wuy-ey { ku_i, s_i, caki_i, *kusalam_i, chelswu_i; } -uy
TO desk top LO GE

(29') Nwukwu_i-ka chayksang wuy-ey
 each SU desk top LO $\left\{ \begin{array}{l} *ku_i \\ * \emptyset_i \\ caki_i \\ *kusalam_i \\ *nwukwu_i \end{array} \right\} \begin{array}{l} -uy \\ GE \end{array}$

chayk-ul kacyekattaka,
 book DO took $\left\{ \begin{array}{l} ku_i \\ \emptyset_i \\ caki_i \\ kusalam_i \\ *nwukwu_i \end{array} \right\} \begin{array}{l} -ka tolo \\ SU again \end{array}$

kacyewatta.
 bring back

'Somebody_i took his_i book from the desk, then brought it back.'

(30') Amwu_i-to chayksang wuy-ey
 anybody also desk top LO $\left\{ \begin{array}{l} *ku_i \\ * \emptyset_i \\ caki_i \\ *kusalam_i \\ *amwu_i \end{array} \right\} \begin{array}{l} -uy \\ GE \end{array}$

kacyeka-cianko,
 took NEG $\left\{ \begin{array}{l} ku_i \\ \emptyset_i \\ caki_i \\ kusalam_i \\ *amwu_i \end{array} \right\} \begin{array}{l} -ka chaykcang-man \\ SU cover only \end{array}$

tteykabelyetta.
 tear off.

'Nobody_i took his_i book from the desk, but somebody tore off the cover.'

In (29') and (30') the anaphors in the second clause are allowable for the same reason that they are permitted to corefer with random reference. The indefinite referents have become definite once they are introduced. The nouns nwukwu and amwu cannot be used for as anaphors in these cases because they are inherently indefinite.

4.3.2. Coreference with Quantified NPs

When the antecedent is a quantified nominal, only caki and the nominal itself are allowed to occur as anaphors, as in (31) and (32). Again, this coreference is accounted for by the principles covering the syntactic conditions described in Chapter Three.

- (31) Kakca_i-ka chayksang wuy-ey { *ku_i } -uy
 each SU desk on LO { *~~se~~_i } GE
 caki_i
 *kusalam_i
 kakca_i }

chayk-ul kacyekatta.
 book DP took

'Each person_i took his_i book on the desk.'

- (32) Modwu_i-ka chayksang wuy-ey { *ku_i } -uy
 all SU desk on LO { *~~se~~_i } GE
 caki_i
 *kusalam_i
 modwu_i }

chayk-ul kacyekatta.
 book DO took

'All_i took their_i book on the desk.'

Note that Reinhart (1983) attempts to solve this problem by suggesting a more restricted condition. That is:

- (A) Quantified NPs and Wh-traces can have anaphoric relations only with pronouns in their c-command syntactic domain.

(Reinhart 1983:122)

This implies that, unlike definite NPs, quantified NPs cannot have any anaphoric relations outside their domain. To support her claim, Reinhart provides examples where coreference is blocked, as in (33) and (34), or is allowed, by condition (A) as in (35).⁸

(33) *The secretary who worked for him_i despised
each of the managers_i.

(34) *The fact that he_i has already climbed this
mountain before encouraged someone_i to try
again.

(35) Each of the managers_i exploits the secretary
who works for him_i.

This condition, however, does not explain the Korean examples provided in (31) and (32). If quantified NPs can have anaphoric relations with pronouns in their syntactic domain, then all of the anaphoric forms should be coreferential with the subject in (31) and (32). As we observed, this is not the case. Only caki and the noun have an anaphoric relation with the subject.

Furthermore, other anaphoric forms can corefer with such quantified NPs in coordinate structures, which we regarded as belonging to discourse. Indeed, in (31') and (32') where coordinate structures are illustrated, the second appearance of all of the anaphors is possible.

4.4. Summary

In this chapter, we have discovered that some anaphoric interpretations are arrived at through the semantic properties of the anaphoric forms, their antecedents, and some others through the kinds of reference the antecedent nominals are used for.

First, the semantic features "humanness" and "animateness" are discussed to consider which anaphors can be used for reference to referents with such semantic features. Secondly, generic and random reference are discussed to determine what anaphoric forms should follow the antecedents. Finally, co-reference with indefinite and quantified NPs are also discussed.

Then we arrive at several semantic principles for each of the anaphoric forms in Korean as follows.

- A. A ^{repeated nominal} full noun phrase and the zero-anaphor can be coreferential with their antecedents, whether they are animate/non-animate or human/non-human.
- B. Caki can be coreferential with a non-human animate NP as well as with a human NP.
- C. Ku and kusalam are only coreferential with Human NPs.
- D. If a non-human inanimate NP is personified, no such restrictions apply.
- E. The zero-anaphor and the full noun phrase can be used to encode generic/random referents.

When the zero-anaphor is utilized for random reference, prior mention of the random referent must be present in the discourse.

- F. All other anaphors are restricted in use for generic or random reference (with some exceptions which are not explainable at this point). That is, with generic reference, definite anaphors can fill the genitive position, and with random reference, definite anaphors can be used where the referent has become definite after the first introduction.
- G. Only caki can have anaphoric relations with an indefinite antecedent within sentence boundary.
- H. Quantified NPs do not have anaphoric relations with zero-anaphor, ku, and kusalam within the sentence boundary.

Notes

1. The definite anaphora for a non-human referent is made up of ku and the noun ket. Ket literally means 'thing.' However, ket is not used as an independent noun. It always occurs with a preceding modifier, such as a demonstrative, or an adjective.
2. To is a suffix particle somewhat like such other markers for subject and object. There are at least 10 special particles like to which have various semantic meanings. Here, SP stands for Special Particle.
3. Note that kusalam is not acceptable in the first sentence of (1), but it is in the second sentence, because kusalam is exclusively a discursal anaphoric form as we discussed in Chapter Three.

4. -tul is the plural marker.
5. For the structures with PP, see p.68 in Chapter Three. Since Korean has a considerably flexible word order except that the verb must be in the rightmost position, the position of PP can be either preposed or embedded.
6. The suffixes -tunci and -lato are two of the special particles in Korean. As we mentioned in Note 2, such special particles provide various meanings.
7. Notice that demonstrative + noun ku ay's referentiality to Cahelswu is questionable in (10). Ku ay, as well as ku salam, seems to refer to a referent beyond the sentence.
8. See Reinhart (1983: 113-114).

CHAPTER FIVE DISCOURSE CONDITIONS

We have examined various syntactic and semantic conditions for anaphora options within sentence boundaries in the previous chapter. Although they seem to work well in some realms, many isolated sentential examples still show unexplained anaphoric occurrences. The reason may be that we tried to exclude discourse conditions and examine solely sentential phenomena. We have hinted that some of the sentential anomalies may have to be considered in connection with discourse.

This chapter takes up some discourse conditions and treats them as governing the choice of the different anaphoric forms in Korean.

By and large, discourse conditions can be considered in terms of discourse structure, cognitive semantics, or pragmatics, as opposed to syntax and semantics for sentential conditions. Hinds (1977, 1978, and 1979) points out that the choice of a full noun over a pronoun is governed by the structure of discourse. This fact is also

related to the topic continuity suggested by Givon (1977, 1982, and 1983). In addition, narrative styles, such as written vs. spoken, and honorific vs. neutral, significantly affect the choice of at least one anaphoric form in Korean.¹

We will examine how different anaphoric forms are chosen by the interactions of these factors.

5.1. Discourse Structure

The structure of discourse in natural languages has been studied by some linguists (Longacre 1979, Chafe 1979, Hinds 1977 and 1978, etc.). Chafe (1979) proposes both a hierarchical and a flow model for narrative discourse to account for thought processes and the organization of discourse. His argument is as follows: There is the basic unit of memory, called focus, which represents the amount of information to which a person can devote his central attention at any one time. Foci are linguistically expressed in phrases.² A speaker clusters foci into thoughts, larger units of coherence containing foci, which appear in language as sentences. Then thoughts are combined into episodes, which are signalled as paragraphs with boundary markers. This hierarchical model, then, is a vertical one that posits the existence of units of thought and corresponding units of language organization of discourse according to the flow of thought.

Hinds (1977) argues that the concept of paragraph may be defined formally, semantically, or by a combination of both criteria according to the structure of language. In other words, the criteria--either semantic, formal, or both--for the determination of paragraph or discourse structure may differ from language to language. He assumes that the paragraph in English may be defined minimally in semantic terms, such as changes in time, location, theme, or participant focus. He concludes that these semantic features are supplemented by anaphoric reference, which defines paragraphs in English as a formal criterion.

For Hinds, paragraphs are made up of segments, which are more closely connected strings of sentences than just a string of sentences. Segments develop the paragraph topic. Specifically, the initial segment of a paragraph is termed "introductory segment." Other non-final segments may be either "motivation," or "highlight," and the final segments may be "motivation," "highlight," or an "unexpected twist." Within a segment there is at least one sentence, forming "the peak," and a number of optional non-peak sentences. A peak sentence contains the most important information in that segment, while other sentences in the same segment are semantically subordinate to the peak. Full NPs occur in a peak sentence while pronouns occur in non-peak sentences.

The present study also proposes a three level structure for Korean narrative discourse: clause, sentence, and

paragraph.³ To consider how anaphoric options are governed by or related with these three levels of units, we need to clarify their formal and semantic features.

The clause is the basic information processing unit in human communication or discourse. Clauses combine into a center of interest or a unit of meaning, a sentence. Sentences develop into a paragraph and paragraphs combine into a larger coherence unit, such as a chapter or story, which we will simply refer to as discourse. Let us take a closer look at each of these levels. In what follows, we will try to clarify each level formally and semantically.

5.1.1.Clause

A clause is a single basic unit of information in human communication (Givon 1975:202). That is, a clause usually represents the smallest meaningful cognitive unit, such as action, event, or state. The unit almost corresponds to a case frame which is more or less a semantic notion with a verb or an adjective as its center.

In terms of syntactic structure, a clause potentially consists of a single case frame, a verb with its associate noun(s). It seems that clauses in Korean roughly correspond to case frames. For example:

- (1) Wulinun hangsang pwuthetanimye kongpwuto
yelsimhi haytko samchengkongwon yakswutheeto

cacwu nolyetanyetta.

'We went everywhere together, studied together,
and often went to Samcheng park to play.'

In example (1), there are three case frames, built around the three verbs, pwuthetani 'go together,' hayt 'do,' and nolyetanyetta 'went to play.' Therefore, three clauses are involved in (1).

However, there are clauses with more than one verb. Chafe (1979:164) extends the clause category to include verbs with complement case frames as their arguments, phrases containing identificatory restrictive relative clauses, and the like. Let us examine whether such constructions could fall into the clause category in Korean.

First, examples (2), (3), and (4) illustrate verbs with complement case frames.

- (2) Na-nun hakyō-ey ka-ki siltha.
I TO school LO go NOM dislike

'I hate to go to school.'

- (3) Ku-nun cepkunha-ki elyep̄ta.
He TO approach NOM hard

'He is hard to approach.'

- (4) Na-nun han soye-wa kil-eyse macwuchi-key
I TO one girl CO road on face ADV
doyetta.
became

'I met a girl on the street.'

Each of the three examples above have two verbs in it: ka 'go' and siltha 'dislike' in (2), cepkunha 'approach' and elyepta 'be hard' in (3), and macwuchi 'face/meet' and toyetta 'became' in (4). Although the first verbs in examples (2) and (3) are nominalized with a nominalizing suffix -ki, while the one in (4) is adverbialized by a adverbializing suffix -key, all of the examples involve two case frames. Thus, each contains one principal case frame, with a secondary (i.e., syntactically subordinate) case frame built around it. Similar constructions abound in Korean.

Now, consider sentences containing relative clauses.⁴

- (5) Na-nun keuy mayil han sonye-wa nay-ka
 I TO almost daily one girl CO I SU
 tani-nun kil-eyse macwuchi-key toyetta.
 go-around road on meet ADV became

'I met a girl on the street where I used to go
 to school everyday.'

Example (5) has three verbs, tani 'go around,' macwuchi 'meet,' and toyetta 'became.' The verb tani 'go around' is actually adjectivalized by an adjectival suffix -nun, which is regarded as a relative clause marker. Note that Korean relative constructions are not formed with a relative pronoun, but with an adjective suffix attached to the verb and they always precede the head noun. Just as in (4), macwuchi 'meet' is adverbialized by key. With one main case frame and two subordinate ones, the example represents only

a single event. It therefore forms one sentence with three clauses. The notion that a clause corresponds to a case frame has thus been adapted for Korean. This unit is not only grammatically definable, but it also coincides with the native judgement of a single basic unit of information.

In Korean morphology, furthermore, clause "boundaries" are morphologically marked by some obligatory verbal endings. Since a sentence is a cluster of one or more clauses, sentence-final endings correspond to sentence final clause endings most of the time.⁵

The numerous sentence-medial clause endings in Korean serve as connectives between clauses. According to Hinds (1975), the sentence medial clause ending -ko often indicates that a certain action is completed and that another action is to begin: -eo, for example, often indicates that the same action is not yet completed and that the same action will continue. Whatever they may mean, it is clear that the clause boundaries are recognized by such morphological markings.⁶

These endings, as clause connectives, represent various semantic relations between clauses. Such relations can be semantically characterized. For example, change in time is expressed by -ko indicating that a certain action is completed and that another action is to begin, or by -myense indicating that the agent is continuing with some action while he starts or does another action simultaneously, etc. These various

endings and their meanings are often one of the hardest things of the language for foreigners to learn.

In the following examples, some of the sentence-medial endings and their meanings are illustrated. They are indicated by underlining.

- (6) 1. Yukhaknyeni toyessulttay na_inun keuy mayil han sonye_j-wa nay_i-ka tani-nun kileyse macwuchikey toyetta. 2. Ø_i Ø_j pangkut wuse cwulswuto, mencye Ø_j malul pwuchilswuto isessulyenman na_inun woynce ssalssalhan phyocengulo kunyang Ø_j cinachey pelikon haytta. 3. kulen nay_{ika} cepkunhaki elyewunci kuay_jto nul tamtamhan phyocengulo pyel kwansimul poici anunchay sikanman huletta. 4. na_inun myetpyeniko yongkilul naye mence malul kkenaylyeko kyelsimhaytciman, kyelkwanun penpeni silphayyetta.

5. kuleten enunal wuli_knun twuli yaksokina hantusi hwanhan wusumul nanwuetko ku hwulonun teepsi cengtawun kiltongmwuka toyetta. 6. Alkoponi hanpanun anietsuna ku_jnun na_iwa kathun haknyenietko Ø_j nay_ika coahaten yesensayngnimuy chin tongsayngikoto haytta. 7. Wuli_knun hangsang pwuthe tanimye Ø_k kongpwuto yelsimhi

haytko \varnothing_k samchengkongwon yakswutheeyto cacwu
 noletanyetta. 8. Ttaun meliey maynun
 liponcocha mayil talun pitkkalul wonhalmankhum
 heyengsimi mankho ikicekin na_{ey} pihay ku_{nun}
 nemwuto kkwumimepko \varnothing_j nekulewun ayyetta. 9.
 Hanaeyse yelkkaci na_{wa} pisuthan cemilakonun
 chacapolswu epsetciman ku_{wa} hamkkey issумыen
 na_{nun} nul maumi phyenanhathko \varnothing_j paywununkey
 manatta. 10. Can kekcengi simhako wuwuley
 ppaciki swiwun nay_{key} ku_{nun} khayhwihan
 wusumkwa yongkilul ankyecwukon haytta. 11.
 Enuttayn nay_{ka} ilpwule talun aytulkwa te
 chinhanchek hayngtonghayto \varnothing_j cilthwuhakinun
 khenyeng kippehaycwuetko cakun ilo \varnothing_i swipkey
 tholacyeto \varnothing_j kkutkkaci chamko \varnothing_j \varnothing_j
 ihayhay cwuetta. 12. Ku_{nun} chamulo tuntunhako
 mitewun oppakathun kiltongmwu,
 maumtongmwuyetta.

13. Cinan yelum keuy sipnyen tongan sosiki
 kkunecin ku_{wa} sewuleyse yenlaki taa cenhwalul
 haytteni tayttum "nayka neeykey chinkwulose
 cwukulcoylul cietkwuna" hanuntay \varnothing_i kasumi
 ccinghaytta. 14. Cey_j wusumkachi khuko siwonhan
 swupaktengelilul satulko kuphi tallyeon ku_{lul}
 poni pheкто \varnothing_i pankawatta. 15. \varnothing_j

kyelhonhayse Ø_j sey ayuy emmaka toyessuna
 oynci caki_jnun cipan salim potanun pakkathulo
 te hungmika itnun moyangilamye Ø_j
 kkalkkaltaytta. 16. Ø_i cengchina sahwoyey
 kwansimi manthen_j ku_jlul sayngkakhako na_ito Ø_j
 ttalawusetta. 17. Nul Ø_j oppakachi nukkyeciten_j
 elilcek chinkw_juwa olaynmaney macwu anca na_jnun
 elin siceluy kosohan chwuektulul kwunpam
 kkamektuthaytta. 18. Kanun kilun com
 taluciman_j wuli_knun seloeykey acikto socwunhan_j
 kiltongmwutulimul tasi hanpen hwaksinhamyense.

(6') 1. When I_i was in the sixth grade, I_i ran into a girl_j on the way to school everyday. 2. Although I_i should have smiled or talked to her_j, I_i just passed by her_j with a cool face. 3. Because she_j seemed to find it hard to approach me_i, she_j did not show any interest on her face either, and time passed. 4. Several times I_i made up my mind to talk to her_j first, (but) the result was always a failure.

5. One day, finally, we_k shared our happy smiles with each other as if we_k had promised to do so; afterward we_k were good friends. 6. Though she_j was not in my class, she_j was in the same grade as I_i was, and she_j was a sister of my favorite teacher. 7. We_k went everywhere together, studied together, and often went to Samcheng park to play. 8. Compared with me_i who was selfish and had desire for having even a different colored ribbon everyday to decorate my hair, she_j was frank and generous. 9. Although there seemed to be nothing in common between us, I_i was always comfortable with her_j, and I_i learned a lot from her_j. 10. She_j always gave laughs and encouragement to me_i who worried about everything and was easy to be gloomy at small things. 11. Sometimes I_i pretended to be more intimate with another girl, she_j was not jealous, she_j was just happy for my additional friendship. 12. She_j was

really a faithful friend, like a brother from the heart.

13. Last summer I_i called her_j in Seoul after having not heard from her_i for ten years, and my heart was beating when she_j said "I committed a sin of neglecting you as a friend." 14. I_i was so happy to see her_j, she_j came to me_i with a watermelon as big as her laughs. 15. Saying that, though she_j got married and became a mother of three, she_j seemed to be more interested in outside world than domestic life, she_j laughed. 16. I_i laughed, too, recalling that she_j was always interested in society and politics. 17. I_i remembered all the things we had shared, and I_i recalled them with my childhood friend_j after a long separation. 18. Making sure that we_k are still valuable friends to each other, although we_k go two different ways.

Although, a sentence may be made up of only one clause, no such example is found in (6). All of the sentences in the above passage consists of more than one clauses, and hence medial endings are found in every sentence. Medial endings are underlined in (6). In (7) are listed the sentence-medial endings with their meanings and functions.

(7)	Sentence #	Medial endings	Meaning or functions
	1	-ttay	time "when"
		-n	relative clause
	2	-to	"either, or"
		-man	"though"
	3	-nci	"because"
		-chay	simultaneosity
	4	-e	continuity
		-man	"though"
	5	-tusi	"likely"
		-ko	"and, then"
		-ni	"after when"
	6	-una	"even if"

	-ko	"and then"
	-n	relative clause
7	-mye	simultaneosity
	-ko	"and then"
8	-n	relative clause
	-n	relative clause
	-ko	"and then"
9	-n	relative clause
	-man	"though"
	-ko	"and then"
10	-ko	"and then"
	-n	relative clause
11	-khenyeng	"nonetheless"
	-ko	"and then"
	-to	"though, either"
	-ko	"and then"
12	-ko	"and then"
	-n	relative clause
13	-n	relative clause
	-ni	"after when"
	-nuntey	"when"
14	-ko	"and then"
	-n	relative clause
	-ko	"and then"
	-n	relative clause
	-ni	"after when"
15	-se	cause
	-una	"however"
	-n	relative clause
	-mye	simultaneosity
16	-n	relative clause
	-ko	"and then"
17	-n	relative clause
	-a	continuity
	-n	relative clause
	-tut	likely
18	-man	"though"
	-n	relative clause

The selection of a third person anaphor will be discussed in relation with clause boundaries in the section 5.2.

5.1.2. Sentence

Syntactically, the end of a sentence in Korean is generally marked by a sentence final ending of the verb in Korean.⁷ Sentence-final clause endings for declarative expressions are -ta for written or formal narratives and -yo for spoken or informal narratives.⁸ Besides, there are various sentence-final clause endings which change with the mood of the structure. For the interrogative mood, for instance, -nikka is used for written or formal narrative, -ka is used for written only, and -ni and -yo are used for spoken or informal narrative. Since they are obligatory markers, it is relatively easy to identify a sentence by this formal criterion. Thus, the example (8), which is a repetition of previous example (6) with the sentence final clause endings underlined, shows the sentence to be one of the most obvious of linguistic units.

- (8) 1. Yukhaknyeni toyessulttay nanun keuy mayil
 han sonye_i-wa nayka tani-nun kileyse macwuchikey
 toyetta. 2. Ø Ø pangkut wuse cwulswuto,
 mencye Ø malul pwuchilswuto isessulyenman
 nanun woyn-ci ssalssalhan phyocengulo kynyang
 Ø cinachey pelikon haytta. 3. kulen nayka
 cepkunhaki elyewunci kuayto nul tamtamhan
 phyocengulo pyel kwansimul poici anunchay
 sikanman huletta. 4. nanun myetpyeniko

yongkilul naye mence malul kkenaylyeko
kyelsimhaytciman, kyelkwanun penpeni
silphayyetta.

5. kuleten enunal wulinun twuli yaksokina
hantusi hwanhan wusumul nanwuetko ku hwulonun
teepsi cengtawun kiltongmwuka toyetta. 6.
Alkoponi hanpanun anietsuna kunun nawa kathun
haknyenietko Ø nayka coahaten yesensayngnimuy
chin tongsayngikoto haytta. 7. Wulinun
hangsang pwuthe tanimye Ø kongpwuto
yelsimhi haytko Ø samchengkongwon
yakswutheeyto cacwu noletanyetta. 8. Ttaun
meliey maynun liponcocha mayil talun pitkkalul
wonhalmankhum heyengsimi mankho ikicekin naey
pihay kunun nemwuto kkwumimepko Ø, nekulewun
ayyetta. 9. Hanaeyse yelkkaci nawa pisuthan
cemilakonun chacapolswu epsetciman kuwa hamkkey
issumyen nanun nul maumi phyenanhatkoØ
paywununkey manatta. 10. Can kekcengi simhako
wuwuley ppaciki swiwun naykey kunun khayhwihan
wusumkwa yongkilul ankyecwukon haytta. 11.
Enuttayn nayka ilpwule talun aytulkwa te
chinhanchek hayngtonghayto Ø cilthwuhakinun
khenyeng kippehaycwuetko cakun ilo Ø swipkey
tholacyeto Ø kkutkkaci chamko Ø Ø

ihayhay cwuetta. 12. Kunun chamulo tuntunhako
mitewun oppakathun kiltongmwu,
maumtongmwuyetta.

13. Cinan yelum keuy sipnyen tongan sosiki
kkunecin kuwa sewuleyse yenlaki taa cenhwalul
haytteni tayttum "nayka neeykey chinkwulose
cwukulcoylul cietkwuna" hanuntay kasumi
ccinghaytta. 14. Cey wusumkachi khuko
siwonhan swupaktengelilul satulko kuphi
tallyeon kulul poni pheкто pankawatta. 15.
Ø kyehonhayse Ø sey ayuy emmaka toyessuna
oynce cakinun cipan salim potanun pakkathulo
te hungmika itnun moyangilamye Ø
kkalkkaltaytta. 16. Ø cengchina sahwoyey
kwansimi manthen kulul sayngkakhako nato Ø
ttalawusetta. 17. Nul Ø oppakachi
nukkyeciten elilcek chinkwuwa olaynmaney macwu
anca nanun elin siceluy kosohan chwuektulul
kwupam kkamektuthaytta. 18. Kanun kilun com
taluciman wulinun seloeykey acikto socwunhan
kiltongmwutulimul tasi hanpen hwaksinhamyense.

All the sentence-final clause endings underlined in the above example are -ta except in the last sentence, 18. Syntactically, 18 is not a complete sentence, because it ends

with a sentence medial clause ending, -myense. As a matter of fact, 18 could be a subordinated adjunct to 17 because of its meaning. Thus, we can still claim that -ta serves a double function as clause ending and as a sentence ending.

Chafe (1979:163) also notes that sentences are typically separated by pauses and, often, by hesitational phenomena of other kinds: pause fillers, lengthenings, false starts, and repetitions. However, the presence of pause can be found between clause boundaries as well. Thus, it can only be used as a supplementary criterion in determining sentencehood.

Sentences are very important discourse units for developing a paragraph. Although a paragraph is "about" only one topic, it may be divided into a number of sentences. Sentences develop the paragraph topic.

A paragraph involves at least one peak sentence. Non-peak sentences may be added to a peak sentence within a paragraph. Hinds notes that a peak sentence is semantically prominent or important, while non-peak sentences are semantically subordinate to a peak sentence. We define peak sentence as a sentence which tells about the semantic core of a segment, and non-peak sentences as sentences which explain or elaborate on the peak sentence.

As an illustration of peak or non-peak sentences, the following discourse is examined.

(9) a. Cinan 31ilul 56seylul ilkilo seysangul
ttenan Lee Pongco,ssiuy cwukumun hyenyek theyne
saxophon yencwucacwung choykolo kkophinun Kil
okywun,ssiwa tepwule ssangpyekul ilwueon
khunpyeli cyettanun cemeyse yenyeykyeyey manun
aswuywumul namkyetta.

b. Thukhi Ø, cakkokeysto namtalun caycwulul
poyeon theyese ku,-uy cwukumun kayokyeyey
khunsonsilo patatulyecikoitta.

c. Wulinala saxophone yencwucalonun myetmyengi
issuna yenyekmwutaylul ttenaitko yenyekulonun
tanyen Kil okywun,, Lee Pongco,ssika
chetsonkalakulo kkophikoitta.

d. Kulena Kilokywun,ssika jazzphwunguy yencwuey
ttwuyenan panmyen ko Lee Pongco,ssinun
wulinalauy centhong kayoey nungthonghayetta.

(The Korea Times:9/1/87)

(9') a. The death of Lee Pongco, who died the 31st
of last month at age of 56, leaves the world of
entertainers with great sorrow, as (he), and Kil
Okywun, were considered to be the two best
saxophone players.

b. Because of (his), extraordinary talent for
composition among other composers, his, death
is mourned as a big loss.

c. Although we have several saxophone players,
they are all retired, and only Kil Okywun, and
Lee Pongco, have been regarded as the best
performers.

d. While Kil Okywun, shows outstanding
performance in jazz, Lee Pongco, was the master
of performing our traditional folk songs.

The information presented in this paragraph may be grouped into two parts: (i) a statement of Lee Pongco's death, which is a big loss, and (ii) his fame as a saxophone player. That is, the author begins with the first sentence (9a) lamenting Lee's death as a big loss. Then the author states his fame among other composers and saxophone players.

The first sentence, (9a), contains the semantic core of the paragraph, i.e., lament on Lee's death, while the second sentence, (9b), is an elaboration on (9a) noting his talent as a composer. Sentence (9c) departs from the comment on Lee's death by noting his fame as a performer. Sentence (9d) elaborates on his fame vis-a-vis Mr. Kil Okywun. Since we defined the sentence which tells about the semantic core as the peak sentence, (9a) is a peak sentence and the others are non-peak sentences.

This organization may be graphically represented by the following diagram.

There might seem to be no formal cue for distinguishing peak sentences from non-peak sentences at this stage, because only a semantic criterion is used here. However, there is a definitive relationship between anaphoric selections and the dichotomy of peak vs. non-peak sentences. This relationship will be discussed in section 5.2.

```

graph TD
    A[ ] --- B[Peak]
    A --- C[Non-peak]
    B --- D[b]
    B --- E[c]
    C --- F[c]
    C --- G[d]
    style A fill:none,stroke:none
    style D fill:none,stroke:none
    style E fill:none,stroke:none
    style F fill:none,stroke:none
    style G fill:none,stroke:none
  
```

Sentence a

Peak

Non-peak

b c d

Semantically, a paragraph is a unit built around a topic. When the topic changes, a new paragraph is needed. Thus, when the participant as the paragraph topic changes, a paragraph boundary naturally appears. Chafe (1979) suggests other factors that lead to marking paragraph boundaries, such as spatial change, temporal change, and orientation toward a new central event. They can also be viewed as topic changes in a broader sense. Let us now take a look at the following example to see how such factors contribute to the marking of paragraph boundaries.

- (11) 1a. "Mwulpangwul"uy cakkalo yumyenghan
 Kimchangyelssi,ka lkkaci hyentay hwalangeyse
 4nyenmanuy kwuykwucenul yelkoitta.
- 2b. Seoul mitaylul kechye Franceey cinchwulhan
 Kimssi,nun "Mwupangwul"ilanun phyohyencwuuycek
 meyseycilul cipyohakey chwucek, France
 hwatanese ilcciki calilul capatta.
- c. Ku,nun "Mwulpangwul" kulimeywe ithalhaci
 anumyenseto saylowun phyohyenpangsikul
 kkunimepi sitohaywatta.
- d. Miswul phenglonka Leeilssi,nun 83nyenuy
 Seoul centtaykkaci Kimssi,uy Mwupangwulun
 cwunsengcekin chakawumul cinin chelcehakey
 kaynyemhwatoyn imicilo kulyecie watsuna
 ipencakphwumesenun Mwulpangwul hanahanaka
 casinuy concaylul hanchung kanyelhakey
 cwucanghakoittako malhaytta.
- e. Thwumyenghan Mwulpangwuluy kulimcatuli
 hanchung citkey kulyecinketto chokwunuy
 pyenmolo ku,uy cakphwumuy kaymyemhwalul
 malhaycwukoitta.
- f. Kwake France sinmwuuy hwalcawa
 Mwulpangwulultaypisikhiten ku,nun ipen
 censieyse hanmwun hwalcawa Mwulpangwulul
 taypisikhye tongyangcekin kamkakuy
 mwulpangwulul chwukwuhakoitta.

3g. Hanpyen, Pariseyse cakphwum-
hwaltongulhakoitnun sinpwuhwaka Kim
Incwungssi_kka 15ilpwuthe 20ilkkaci
Seoul Galleryeyse kwuykwucenul katnunta.

h.ø_k 84nyen Mihwalangeyse chotaycenul kacinhwu
3nyenmanuy censi.

4i. Chwungnam Pwuye thaysayngulo Seoul mitaywa
tong tayhakwonul colephan Kimssi_knun
60nyentayey chwusangpyohyencwuuyey nwunttun
cengyelcek hwakaimyenseto yenghonuy kwuceyey
mokmalla hanun kwutocaloseuy twukalaykilul
keletta.

j. 67nyen "miswul kongpwululwihay" topwulhan
ku_knun kukillo tominko swutohoyeyse
sinpwuswuepul ssaa 74nyen sinpwuey
sephwumtoyetta.

k. Han ttaynun ø_k hwakawa sinpwuuy kili
etkallye kaltungul ilukhikitohaytsuna iceynun
ø_k "hyengthayuy alumtawum" kwa "Yenghonuy
alumtawum"ul tongilsihakey toyettanun
Kimsinpwu_knun payksaykuy pathangey yenghonuy
hulumkati cayupwunpanghan saykchayuy cohwalul
kwusahakoitta.

(The Korea Times: 9/9/87)

(11') 1a. Kim Changyel_i, who is famous as the
"water-drop artist," is holding a homecoming
exhibit in Hyentay Gallery after 4 years of
absence.

2b. Kim_i, who graduated from the College of Art of Seoul National University and continued to study in France, traces the subject of "the water drop" within expressionism, and has established a good reputation in French painting circles.

c. He_i also tried new methods continuously without departing from "the water drop" painting.

d. Art Critic Mr. Lee Il_j says that Kim_i's water drop had been a conceptualized image until '83 Seoul exhibit, but each water drop shows its shape very strongly at this time.

e. The fact that the shades of transparent water drops are painted very dark shows one of his_i current method and conceptualization of his_i works.

f. He_i, who had contrasted the letters in French newspapers with "the water drop" in past years, now contrasts Chinese characters with the water drop to find an oriental sensation.

3g. On the other hand, Kim Incwung_k, who is a Catholic priest and a painter, also is holding a homecoming exhibit from 15th to 20th in the Seoul Gallery.

h. It is the first one ever since (he)_k had an exhibit in the Mi Gallery in '84.

4i. As a native of Chwungnam and a graduate of the College of Art at the Seoul National University, Mr. Kim_k goes two ways, as a passionate artist of abstract expressionism and as a Catholic priest.

j. He_k, who went to France "to study art" in '67, entered "Domingo Congregation" and became a priest in '74.

k. Kim_k, who says that now (he)_k can find an identity between "the beauty of figure" and "the beauty of spirit," although once (he)_k had suffered from the conflict between the two ways, expresses the harmony of various colors on white background.

Cognitively, example (11) has 4 paragraphs. The first paragraph introduces an artist, Kim Changyel_i, the second talks about his artistic methods, the third introduces another artist, Kim Incwung_k, and the fourth tells about his unusual life both as a priest and as an artist, and his artistic method. The paragraph boundaries, however, coincide with several other notional characteristics.

It is obvious that the shift between the second and the third paragraph is marked by the change from one participant to another, i.e., the third paragraph introduces another artist. This divides the discourse into two main sections, with two paragraphs in each section. Within each section, the paragraph boundary is temporally marked: the first and the third paragraphs are in the non-past tense while the second and the fourth are in the past tense. The first paragraph of each section introduces the artist and exhibit at present time, while the second goes back to his past work. In this example, the function of spatial change is not clear.

The following is a typical example in which a spatial change marks the paragraph shift.

(12) 1a. Ilpon tongkyeng, Sinchenok_issika
thayenankotsita.

b. Kunye_inun tonkyengeyse kwukminhakyowa
cwunhakkwacengin yongyachensilkwa yehakkyo
2haknyenul cwungthoyhaytta.

c. Haypang itumhayuy ilita.

2d. Sin_issinun palo kuhayey apeci Sinkwuhossiwa semoin Cengssi, oppa Pokyeng, namtongsayng Sankwukssiwa hamkkey hankwuksen kwuykwuksenul thatta.

e. Natsen pwusanhangey tochakhanttannun 1946nyen 4wuel 15il.

(Kacengcosen, 6/85, p.114)

(12') 1a. Tokyo, Japan is the place where Mrs. Sin_i was born.

b. She_i went to an elementary school and a girl's junior high there.

2c. It was one year after Korea's Independence.

d. Mrs. Sin_i rode a homecoming ship to Korea with her father Mr Sin, her stepmother Ceng, brothers Pokyeng and Sangkwuk in that year.

e. The date when they arrived in Pwusan was 4/15/1946.

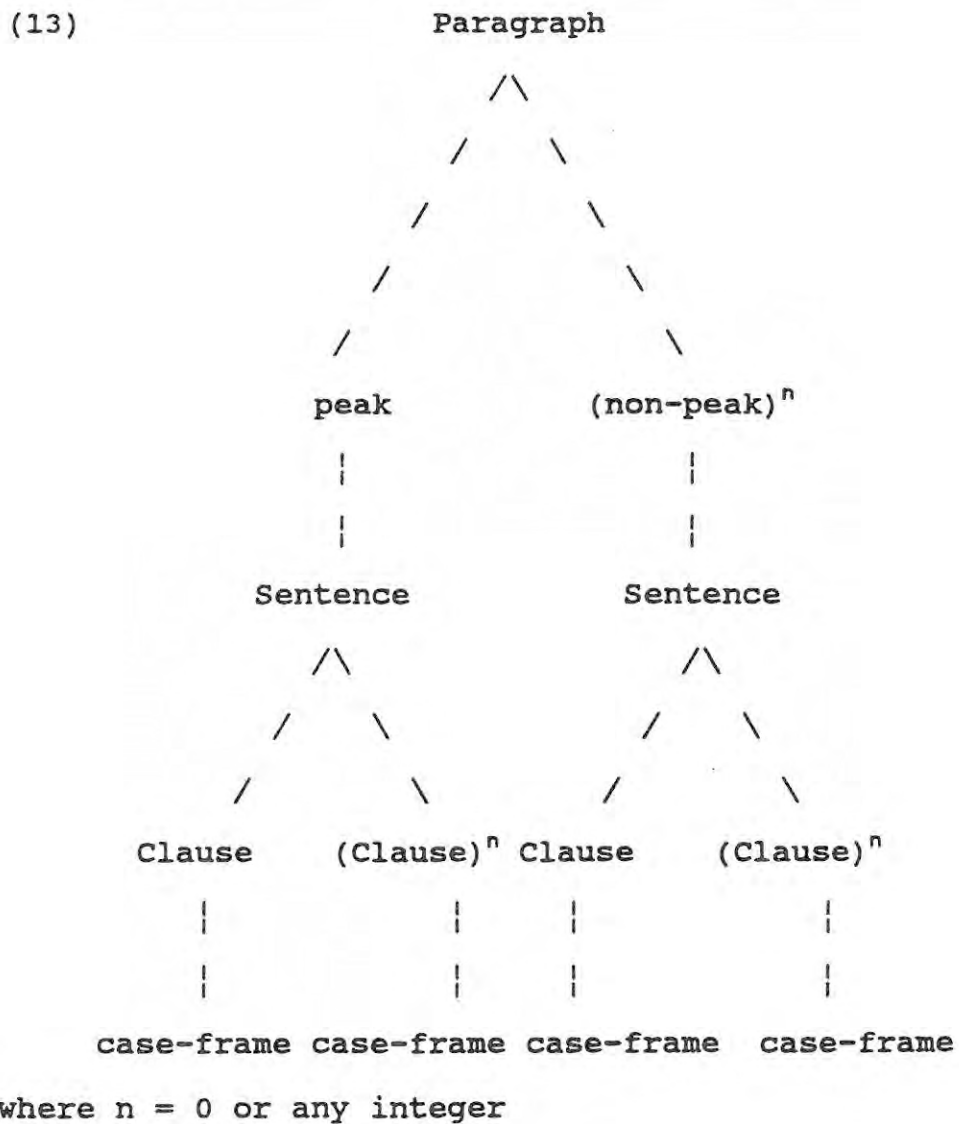
The spatial setting in (12a and b) is Tokyo, Japan. A different spatial setting, among other signals, marks the event that Mrs. Sin moved to Korea in (12c, d, and e) as a separate paragraph from (12a and b).

In addition to these, there are other signals to mark the paragraph boundary. One of them is anaphor selection. Anaphor selection not only marks paragraph boundaries formally, but also signals clause boundaries and peak vs.

non-peak sentences. It will be discussed in detail in section 5.2. in this chapter.

5.1.4. Summary of Discourse Structure

So far, we have outlined the hierarchical structure of discourse. It is represented in the following diagram (13).



This diagram illustrates the basic structure of a paragraph. Semantically, a paragraph is a thematic unit and, hence has a topic. A paragraph topic may develop in the way Hinds suggested: introduction, motivation, highlight, and/or unexpected twist. When a discourse changes from one paragraph topic to another, a paragraph boundary is created.

5.2. Anaphora Selection in Discourse Structure

We have so far demonstrated the existence of a paragraph structure in Korean, along the lines of Hinds and Chafe. In this section, we will try to find out what more tangible and formal features characterize such a structure. Admittedly, formal criteria for the determination of peak vs. non-peak sentence and paragraph boundaries are less clear in the traditional sense than those for the clause or the sentence. Here, we will discuss the selection of anaphoric forms in Korean as one of the formal criteria that may complement the cognitive and notional characteristics of the paragraph.

By and large, a full NP signals the beginning of a paragraph or a peak sentence. A pronoun or zero-anaphor occurs in non-peak sentences. These facts are illustrated in example (11), the English translation of which is repeated below.

- (11') 1a. Kim Changyel, who is famous as the "water-drop artist," is holding a homecoming exhibit in Hyentay Gallery after 4 years of departure.

2b. Kim_i, who graduated from the College of Art of Seoul National University and continued to study in France, traces the subject of "the water drop" within expressionism, and has established a good reputation in French painting circles.

c. He_i also tried new methods continuously without departing from "the water drop" painting.

d. Art Critic Mr. Lee Il_j says that Kim_i's water drop had been a conceptualized image until '83 Seoul exhibit, but each water drop shows its shape very strongly at this time.

e. The fact that the shades of transparent water drops are painted very dark shows one of his_i current methods and the conceptualization of his_i works.

f. He_i, who had contrasted the letters in French newspapers with "the water drop" in past years, now contrasts Chinese characters with the water drop to find an oriental sensation.

3g. On the other hand, Kim Incwung_k, who is a Catholic priest and a painter, also is holding a homecoming exhibit from the 15th to 20th in the Seoul Gallery.

h. It is the first one ever since (he)_k had an exhibit in the Mi Gallery in '84.

4i. As a native of Chwungnam and a graduate of the College of Art at the Seoul National University, Mr. Kim_k goes two ways, as a passionate artist of abstract expressionism and as a Catholic priest.

j. He_k, who went to France "to study art" in '67, entered "Domingo Congregation" and became a priest in '74.

k. Kim_k, who says that now (he)_k can find an identity between "the beauty of figure" and "the beauty of spirit," although once (he)_k had suffered from the conflict between the two ways, expresses the harmony of various colors on white background.

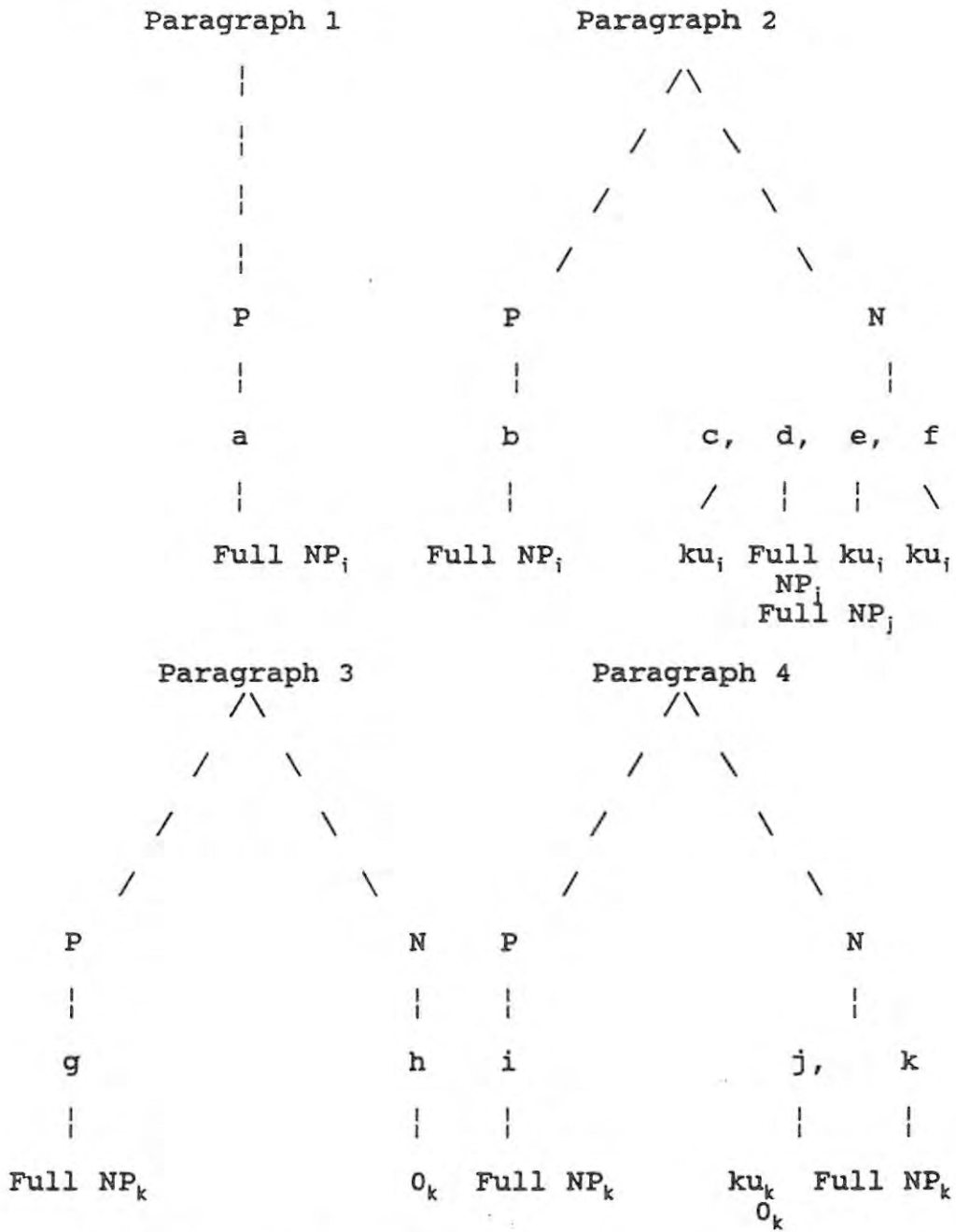
The proper names, equivalent to full NPs, are indexed. He/his and (he) are also indexed, representing ku and 0, respectively.

Following the discussions of the cognitive and notional organization of the paragraph in the preceding sections and coupled with the different choices of the anaphoric forms, we can arrive at a hierarchical diagram of the paragraph structure for the passage in (11'). It is given below as (14).

The diagram in (14) shows that a full NP regularly occurs in the peak sentence, while a pronoun or zero-anaphor occurs in non-peak sentences. Exceptional occurrences of the full NP are found in sentence (d) and (k). In (d), the occurrence of two full NPs, Lee Ilssi 'Mr. Lee,' and Kimssi 'Mr. Kim,' can be explained as follows: Since 'Mr. Lee' is now being introduced as a secondary topic, it is natural for it to appear in a full NP. On the other hand, although 'Mr. Kim' has already been introduced, the intervening full NP Lee Ilssi 'Mr. Lee,' which has just been introduced, would have priority for co-reference over any pronoun or zero-anaphor that might occupy the position of Kimssi 'Mr. Kim.' At this point, it is not clear why the lexical NP appears in the non-peak sentence (k).

Notice that it is completely grammatical to substitute a full NP for the occurrence of ku in (10c, e, f, h, and j). Conversely, it is also grammatically possible to substitute

(14)



where P = peak sentence
 N = non-peak sentence

ku for the full NPs in (10a, b, d, g, i, and k). These substitutions, while grammatically possible, would signal a distinct difference in the organizational structure of the paragraphs.

Let us now take a portion of the passage in (11) and do some substitution and see what happens to the structure of the paragraph.

(15) f. Kwake France sinmwuuy hwalcawa

Mwulpangwulul taypisikhiten Kim Cangyelssinun
ipen censieyse hanmwun hwalcawa Mwulpangwulul
taypisikhye tongyang-cekin kamkakuy
mwulpangwulul chwukwuhakoitta.

3g. Hanpyen, Pariseyse cakphwum-
hwaltongulhakoitnun sinpwuhwaka kuka
15ilpwuthe 20ilkkaci Seoul Gallery-eyse
kwuykwucenul katnunta.

h. Kim Incwungssinun 84nyen Mihwalangeyse
chotaycen-1 kacinhwu 3nyenmanuy censi.

4i. Chwungnam Pwuye thaysayngulo Seoul mitaywa
tong tayhakwonul colephan kunun 60nyentayey
chwusang-pyohyencwuuyey nwunttun cengyelcek
hwakaimyenseto yenghonuy kwuceyey mokmalla
hanun kwutocaloseuy twukalaykilul keletta.

(15') f. Mr. Kim Cangyel, who had contrasted the
letters in French newspapers with "the water

drop" in past years, now contrasts Chinese characters with the water drop to find an oriental sensation.

3g. On the other hand, he who is a Catholic priest and a painter, also is holding a homecoming exhibit from 15th to 20th in the Seoul Gallery. h. It is the first one ever since Mr. Kim Incwung had an exhibit in the Mi Gallery in '84.

4i. As a native of Chwungnam and a graduate of the College of Art at the Seoul National University, he goes two ways, as a passionate artist of abstract expressionism and as a Catholic priest.

In the original passage (11), f ends the second paragraph and g, the peak sentence, begins the third paragraph. With the substitution of the NPs as in (15), however, the reader would understand the discourse differently. The pronoun ku in g would be interpreted as Kim Cangyel, not as Kim Incwung, because no other participant except Kim Cangyel has been introduced. As a result, g would no longer be discoursally prominent. Since the adverb hanphyen 'on the other hand,' which begins the sentence in g, usually marks the change of a theme or sub-theme, the reader would still recognize g as the beginning of a discourse unit at a sub-paragraph level due to the absence of a full NP. The full NP Kim Incwung in h is now being introduced into the discourse for the first time. However, it is hard to say that the sentence is a peak sentence and marks a paragraph boundary; because the new participant is introduced in a subordinate structure, which usually contains old or presupposed information. In sentence

i, ku may refer to Kim Incwung in g, thus no paragraph boundary is marked there.

Although we might perceive a different discourse structure purely on the basis of such substitutions, it would make the passage very awkward because of the incongruences between the anaphors and the full NPs on the one hand and such other structural signals as connectives and subordination on the other. Thus, we can conclude that anaphoric substitutions of full NPs are not random at all, but they are the result of a discourse rule: a full NP occurs in the peak sentence to mark a paragraph boundary while the zero-anaphor and pronoun occur in non-peak sentences.

At this point, it is not clear how to distinguish between the occurrences of ku and a zero-anaphor with regard to paragraph structure. Other factors, such as discourse continuity discussed in the following chapter, would pinpoint their differences.

So far, the relationship between paragraph structure and the selection of anaphoric forms has been examined. The reflexive caki, however, has been intentionally excluded from our discussion, because it has more bearing on factors like the speaker's point of view than on paragraph structure. It will, therefore, be discussed in the following chapter.

It is obvious that paragraphs do not always utilize their participant anaphora as straightforwardly as do those in (11).

Complications may arise when there are competing referents for the same anaphor. The example in (16) involves three human participants, Tom, the master, and George, who all appear anaphorically in some clauses. We will try to examine how discourse structure and the choice of anaphora interact with competing referents. (The English version was deliberately made literal.)

- (16) 1a. Halwunun maumssi chakhan Tom_i-i ilul cal
 mothanun talun noyeyeykey_j caki_i-ka ttan
 mokhwalul nanwue cwun kesi palkaktoye, Tom_i-un
 cwuin_k-eykey silkhet twutwulkye macatta.
- b.I ttaymwuney, thunthunhaytten Tom_i-to pyengi
 tule nalo yawie katta.
- 2c. Kulena, ku_i-nun hayngyena cen cwuinin
 Shelbi_i-ka caki_i-lul tolo chacule onun nali
 issulci moluntanun himangul ciniko salakatta.
- d.Kulekhe toymyen, Ø_i kuliwun Ø_i anaywa
 casiktulto tasi mannalswu itko, George_m
 tolyengnim- to mannakey toyki ttaymwunita.
- 3e. Kulena, ilen himangto alangkot epsi,
 nongcang cwuin_k-un nali kal swulok Ø_i te
 motsalke kule, Ø_i momun teuk yakhay cikiman
 haytta.
- f.Kulenun tonganey, Tom_i-i tomang halyenun
 yeca noyey_n-lul toun ili tulena, Ø_i tto Ø_k

yeca noyey_n-lul toun ili tulena, Ø_i tto Ø_k
cwuktolok twutwulkye macatta.

4g. Kuttayey, imi hwulyunghan chengnyen-i toyn
George_m-nun, Tom_i-ul chacule sapangulo
tolataniko issetta.

h. Ku polami issese, Ø_m Tom_i-i itnun kosul
chatkinun hayssuna, ttaynun imi nuce,
akkapketo ku_i-nun pelsse i seysang salami
anietta.

i. Tom_i-un motun himangul ilkho seysangul
ttenan twiyetta.

(Kwuke 5-1, pp. 97-99)

(16') 1a. 'One day, Tom_i was hit by the master_k,
because (the fact) that he_i gave self [=his]_i
cotton to another unskilled slave was
revealed. b. Therefore, Tom_i who had been
strong enough, got sick and became weaker and
weaker.

2c. However he_i continued the life, hoping that
Shelbi_i, the previous master, would get
(him)self_i back someday. d. (When the hope
comes true), (he)_i can get together with (his)_i
family again and see little George_m.

3e. However, despite of this hope, the master_k
made (him)_i work harder and harder, (his)_i
health was getting worse. f. At that time,
since Tom_i helped a slave to flee (from the
cotton farm), (he)_i was hit bitterly (by the
master_k) again.

4g. Meanwhile, George_m who already had become
a fine young man, was seeking Tom_i. h. Finally
(he)_m found the place where Tom_i was, but it
was too late, he_i already departed this world.
i. Just before that, Tom_i died without any
hope.'

This discourse consists of four paragraphs. Just as in (11), the majority of full NPs appear in the first and peak sentence of each paragraph, whereas the kus or zero-anaphors mostly appear in the non-peak sentences. A diagrammatic representation for the discourse structure and the distribution of the anaphors is given in (17).

However, this diagram shows some irregularity: the peak sentences, c and h, include pronouns, while non-peak sentences g and i have full NPs. To explain this apparent irregularity another discourse notion must be introduced first. It is the notion of "sentence topic."

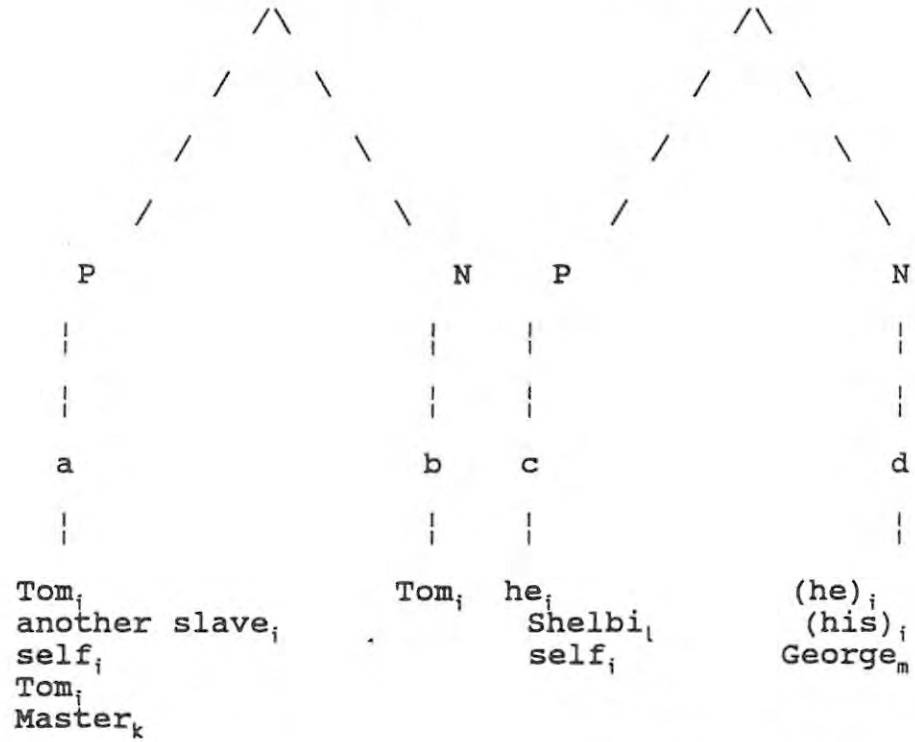
Li and Thompson (1976:461-66) list a number of properties in which topics differ from subjects. Many of them apply to Korean. They are here adapted for Korean discourse, as summarized below.

- (a) Topics are always definite or generic. Proper nouns are also understood as definite.
- (b) Topics are usually marked by the particle nun.
- (c) Topics tend to occupy the sentence-initial position.
- (d) Topics need not have a selectional relation with any verb in the sentence: that is, they need not be arguments of the predicate.

(17)

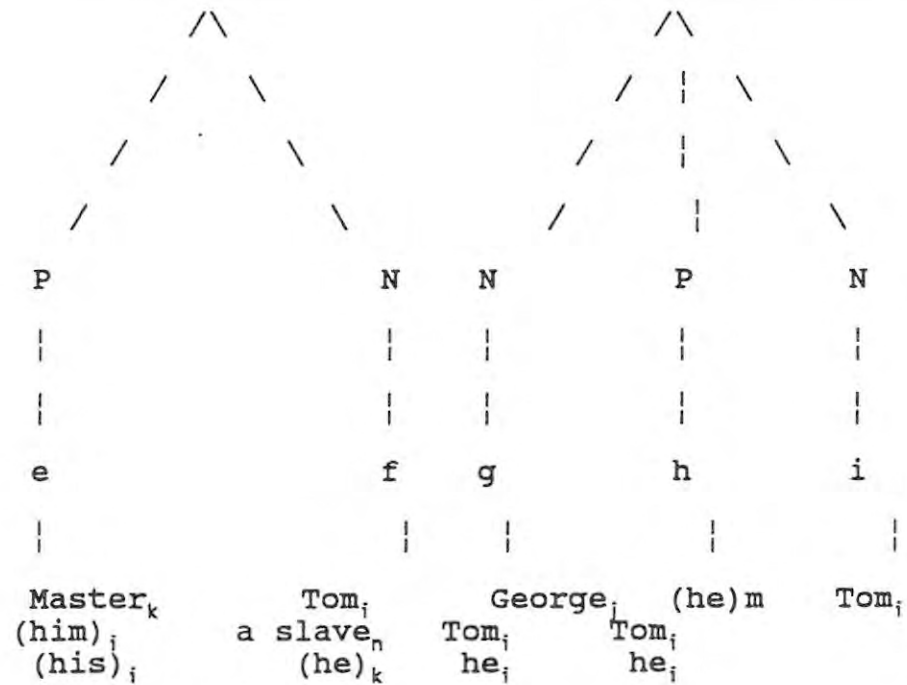
Paragraph 1

Paragraph 2



Paragraph 3

Paragraph 4



- (e) "Topic" is a discourse notion. The functional role of the topic is constant across sentences, although the grammatical role of a topic could change through a discourse passage.

When we apply the above criteria to the discourse in (16), the topical NPs are easily recognized. Some NPs possess substantially more such properties than others in the passage. Thus, they are more topical in nature than the other NPs, which can be regarded as non-topics.

In our previous discussion, a full NP has been shown to mark the paragraph boundary. In the peak sentence (a), the full NP Tom appears twice. The first occurrence of it unambiguously serves as a paragraph boundary marker. But the second occurrence does not because it is much less topical than the first one. It would appear as ku if it were not for the presence of another full NP, talun noyey 'another slave.' In other words, talun noyey and the first appearance of Tom would be competing for coreference with the pronoun ku, and thus cause ambiguity, though this ku would still be more likely to corefer with the topical "Tom" than "another slave." For those reasons, the full NP, Tom, appears here instead of a more usual ku, whether it marks a paragraph boundary or not.

A third full NP, cwuin 'master,' appears there simply to introduce a new participant into the discourse. In b, the full NP, Tom, appears again for the same reasons. It does

not mark a paragraph boundary because it is not highly topical, but it is used to avoid competition for coreference. In c, no example of the full NP, Tom, is found, although the sentence does start a new paragraph. Notice that a full NP is not the sole marker for a paragraph boundary. In this case, the adversative kulena 'however,' which often indicates temporal, spatial, or event change, also serves to mark the beginning of the paragraph. This marking is definitely weaker than when there is a full NP at the same time.

In the non-peak sentence d, zero-anaphor appears and the full NP, George, is introduced for the first time, but not as a topic. The next paragraph again starts with the adversative kulena 'however' marking a paragraph boundary. Here, however, the topic is shifted from "Tom" to "the master" and therefore the boundary is doubly marked with a connective and a full NP cuuin 'the master.' In f, the non-topical full NP, Tom, cannot be replaced by the pronoun or zero-anaphor, which would refer to the topical cuuin 'the master.' But Tom does not serve to break up the paragraph because it is in a subordinate clause. In paragraph 4, the first full NP George is reintroduced as the topic and serves to mark the beginning of a new paragraph. Tom appears in g and h, where ku would co-refer with the topic George instead of Tom in the preceding paragraph.

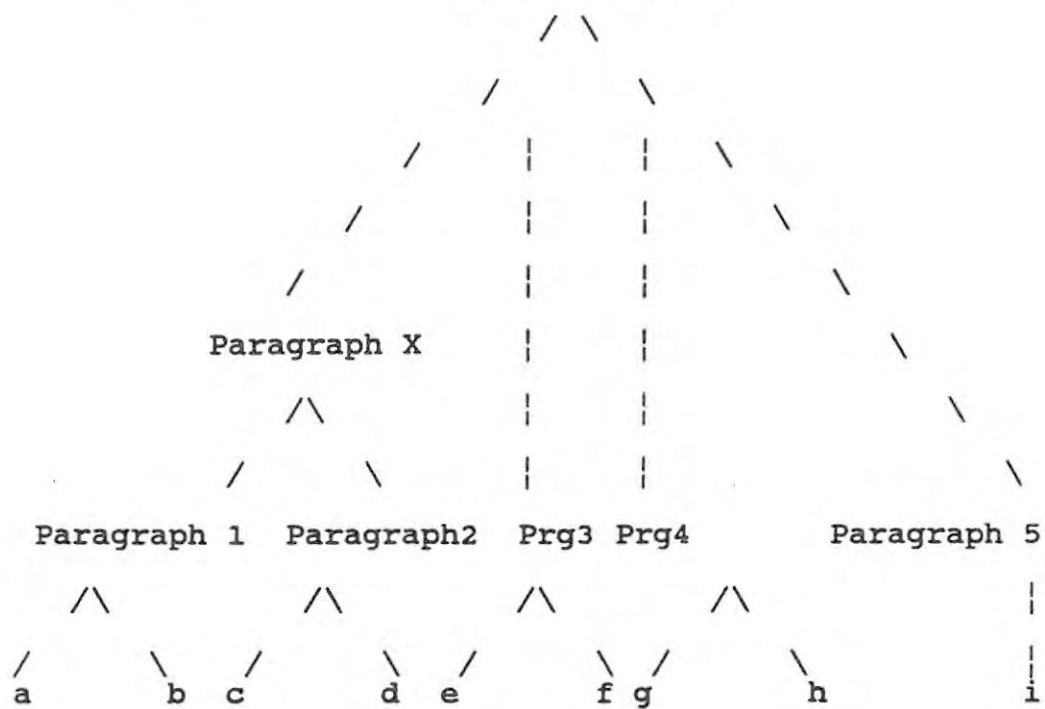
Finally, Tom appears as the topic in sentence i. It is therefore more likely than not that sentence i should be regarded as a paragraph by itself separate from the previous sentences.

We have now examined the discourse passage in (16) showing not only how the selection of a full NP marks a paragraph boundary but also that the topicality of an NP explains how a pronoun with competing referents can unambiguously refer. The net result is the appearance of full NPs where no paragraph boundary is evident. On the other hand, a paragraph boundary may be strongly marked by both a connective and a full NP (as in 2.e) or weakly marked by a connective only (as in 1.c). Furthermore, sometimes an author may not bother to separate a short paragraph from its neighboring one (as in 4.i). Based on the findings here, we propose to revise the paragraph structure of (16) as (17') to replace (17).

As we look at further discourse examples, more exceptions will be found. This is due to the fact that in this section only discourse structure conditions are considered in the choice of anaphora. In what follows, additional conditions of other kinds will be discussed to explain such deviations.

(17')

Discourse (16)



5.3. Narrative Style

Unlike in English, some anaphoric forms can be restricted to a specific narrative style in Korean. Consider the pronoun ku. We shall see whether it is restricted to written or spoken narratives, and/or to honorific or neutral narratives.

5.3.1. Written vs. Spoken Narrative

Although the pronoun ku is very commonly used in written discourse, its use seems very limited in spoken narratives. If one uses the pronoun ku in a conversation or any spoken narrative, it may sound very awkward to Korean speakers. To support this idea, the author read the discourse in (16), which is examined in the preceding section, to three Korean native speakers and asked them to tell the story back to this author. The following are their spoken versions of (16).

- (18) 1....Tom-un ce..... caki-ka ttan
 mokhwalul talun salameykey nanue cwutaka ǃ
 cwuinhante maylwul mopsi macatayo.
 kureta.....um....
- 2.ǃ yeca noyeylul towase tomangkakey haytnunte
 um.. kulayse...ǃ cwuinhante tto
 macattayyo
3. Kulayse...cemcem ǃ momi yakhay cyese....
 yakhay cyetayo. enunal George-ka

chacawatnuntey Ø Tom-un imi cukettelayyo.

(18') 1. Tom gave the cotton self (he) picked to another slave, so he was hit by the master bitterly.

2. Then (he) helped a female slave to flee. So (he) was hit again.

3. Therefore, (he) was getting weaker and weaker. One day, George found (him), Tom died already.

(19) 1. Harwunun ... um... maumssi chakhan Tom-i tarun noyelul taysinhayse mokhwalul tta cwun sasili palkaktoye Ø cipcwuineykey hotoykey maylul macatayyo ...

2.....um...ankulayto mom-i yakhan Tom-i tewuk momcye nwupkey toytsuna Ø Georgelul kitalikettanun himangulo salmul phokihaci anunchay Ø yelsimhi salakattayyo...

3.....kulwtwn cwung ...um... Tom-i tto talun noyeylul tomanghanketul towa cwun sasili palkaktoye Ø cipcwuineykey tasi mucin maylul maca Ø calie nwupke toyetayo.

4....ku cuum ...ah... George-nun cangsenghaye Ø chakhan Tom-ul sapangey swusomwunhay ayssun kyelkwa Ø kyelkwuk Tom-ul chatke toyetsuna ku ttaynun imi ku-salami sesangul ttenan twiyettayyo.

(19') 1. One day, since Tom gave cotton to another slave, (he) was hit bitterly by the master.

2. Although Tom had gotten sick, (he) continued (his) life sincerely, Ø hoping that

(he) can meet George again.

3. Meanwhile, since Tom helped another slave to flee (from the cotton farm), (he) was bitterly hit by the master again, (he) has gotten sick again.

4. At that time, George became an adult, (he) was seeking Tom everywhere, (he) found where Tom was, the man already departed this world, though.

- (20) 1. Tom-ilanun hukin noyeyka itsetnuntey .. ah
 .. ku nongcangeyse Ø noncang cwuinui .. ku ..
 simhan haktaylul patumyense kurentaylo Ø
 yelsimhi .. ah .. himangul kaciko
 salakatsetayyo
- 2...ah... Tom-i ilhanun cwungeto Ø nalumtaylo
 calsalakamulo hayse cwuinhanthe maylul matkito
 haytnuntey ... kulelttay mata...ah
 ...ku...George tolyengi encenkanun...yeytnal
 cwuiniten George tolyengi encenkanun Ø
 chacawase sikkutulul mannalswu
 itke hay cwul kelako Ø sayngkakhako
kuketsul himangul kaciko salko itsetayyo.
- 3.... ah ... kuletaka .. ah.. Georgetolyenguy
 ... hanphyon ... hwulwunghi sengcang hayse
 nalumtaylo Ø Tom-ul chaculyeko nolyekhako
 itsetnunte....ah.. machimnay George tolyengi
 i tom-ul chactasulttay ittaynun imi nemwu
 ttayka nucose, Tom-un imi...ku...seysangul
 ttenan twiyettayyo.

(20') 1. There was a slave called Tom. (He) suffered from the hard work (which the master had him do), (he) tried to live sincerely though.

2. (Whenever) Tom was hit by the master from time to time, because of 0 being good, (he) thought that someday George, the previous master, would find (him), (he) thought that.

3. On the other hand, George became a fine young man, (he) tried to find Tom. Finally, George found Tom. It was just after Tom departed this world.

The three spoken versions above clearly show that no pronoun is used at all. The first speaker in (18) and the third speaker in (20) use only zero-anaphora and full NPs, but no pronouns. The second speaker in (19) uses the definite NP in the form of "demonstrative + NP," kusalam "that man" instead of any pronoun. Here kusalam seems to be an intermediate form between the zero-anaphor and a full NP (just like konohito 'this person' or anohito 'that person' in Japanese).

A recording of the real conversation in example (3) of Chapter One (p.5) provides another piece of evidence of the usual absence of ku in spoken narratives. In addition, two more conversations were recorded for examination.⁹ The result is uniform: no ku is used in any of the conversations. All the other anaphoric forms--full NP, kusalam, caki, and zero-anaphora--however, are used in both spoken and written narratives.

At this point, it is clear that the pronoun ku is not a form used in spoken narrative. Of course, this claim has to be supported by a much more extensive data base from actual use.

Indeed, Korean written narratives are different from spoken narratives in other respects. For example, as we mentioned earlier, the sentence final suffix ending in spoken narratives differs from that in written narratives.¹⁰ If the endings are reversed, the speaker would be regarded as very stiff, or too formal to talk with.

Another interesting difficulty discovered in (18) and (20) is that spoken sentences tend to be longer and easily merge with each other into a paragraph. The narratives given in (19) and (20) clearly show this tendency.

In some planned spoken discourse, such as preaching, presentations at conferences, or other forms of public speech, the speaker may use the pronoun. However, in such cases, the style is closer to that of the written narrative than to that of the spoken narrative in all other respects.

5.3.2. Honorific vs. Neutral Narrative

Honorifics are one of the obligatory syntactic categories in Korean narratives, both in writing and speech. Usually three kinds of honorifics are distinguished in terms of the interaction between the speaker, the hearer, and the third-person participant: honorific for the third-person

participant, honorific for the third-person participant from the hearer's point of view, and honorific for both the speaker and the hearer.¹¹

The last one, the honorific for both the speaker and the hearer, is not considered here, because it does not involve the honorific for the third person.

The second one, the honorific for the third-person participant from the hearer's point of view, is somewhat complicated. Although the third person may be in a lower status in terms of power and solidarity¹² than the speaker, the speaker uses this honorific system when the third person is higher than the hearer in status: when a father talks about his younger brother with his son, the father uses such honorifics for his younger brother. This case is not considered in this paper either because this situation is not usually found in written narratives except in private letters. Moreover, it is not easy to find such situations in spoken discourse where the present author resides.

The first one, the honorific system for the third person, is used when the third person is higher in status than the speaker, or than both the speaker and the hearer. This is the only concern of the present paper.

Actually the hierarchy of power and solidarity is not absolute. Sometimes it depends on the speakers' perception. However, there are still commonly agreed-upon higher positions, such as grandparents, parents, teachers, the king,

God, great people in history, etc. Therefore such honorifics are often found in Bible translation.

- (21) 1. Yeyswu_i-kkeyse saneyse naylye osica, manun kuncwung_i Ø_i twittalatta.
 2. Kuttayey napyeng hwanca_k hanaka yeyswu_i-kkey wase Ø_k celhamye, "cwunim...."
- (21') 1. 'When Jesus_i came down from the hill, large crowds_j followed him_i.
 2. Then a man_k suffering from a dreaded skin disease came to him_i, knelt down (before him), and said, "Sir,....."(Matthew 8:1-2)'
- (22) 1. Yeyswu_i-kkeysenun senglyenguy nungleykul katukhi patko Ø_i Galilaalo tolakasietta.
 2. Yeyswu_iuy somwunun kukot motun cipangey twurwu phecyetta. Yeyswu_i-kkeyse-nun yele hoytangeyse kaluchisimye Ø_i motun salam_jeykey chingchan-ul patu-si-etta.
- (22') 1. 'Then Jesus_i returned to Galilee, and the power of the Holy Spirit was with him_i.
 2. The news about him_i spread throughout all that territory. He_i taught in the synagogues and was praised by everyone_j.' (Luke 4:14-15)
- (23) 1. Yeyswu_i-kkeyse nacalo-lul mwutemeyse pwulenaye Ø_i cwukun catul kaunteyse sali-si-l ttay ku caliey katchi itten salamtul_j-i motwu kuil-ul cungenhayetta.
 2. Kwuncwung_ki yeyswu_ilul macule nakanketto yeyswu_i-kkeyse ilekhe kicekul poye

cwu-si-ettanun malul θ_k tuletki taymwunita.

3. Palisaipha salamtul_{un} "ca, iceynun ta thulyetsumnita. Motun salam ta ku_i-lul ttala kako itci ansumnika?" hamye selo kekcenghayetta.

(23') 1. 'The people_j who had been with Jesus_i when he_i called Lazarus out of the grave and raised him from death had reported what had happened.

2. That was why the crowd_k met him, because (they_k) heard that he_i had performed this miracle.

3. The Pharisees_i then said to one another, "You see, we are not succeeding at all. Look, the whole world is following him_i."

(kkeyse: honorific subject marker, si: honorific verbal suffix)

The above discourses are all from the New Testament. The Korean translations are from Korean New Testament (Common Translation), while the English translations are from The New Testament in Today's English Version (American Bible Society). They clearly show differences in pronoun usage between Korean and English. Jesus is not referred to by the pronoun ku in the above verses, because he is a universally respected man, though it is called for by other discourse conditions, i.e., marking peak sentences, referring to the whole theme in moderate length, etc. Since Jesus is regarded as the greatest man in the Christian world, he is almost absolutely in the high hierarchy. There is only one place where Jesus

is referred to by the pronoun ku, i.e., in (21-3). However, it is not a counterexample, because the ku in (21-3) is used in the speech of Parisees, who do not believe in Jesus and will not use an honorific form. These facts serve to substantiate the hypothesis that ku is very much restricted or not used at all in honorific narrative.

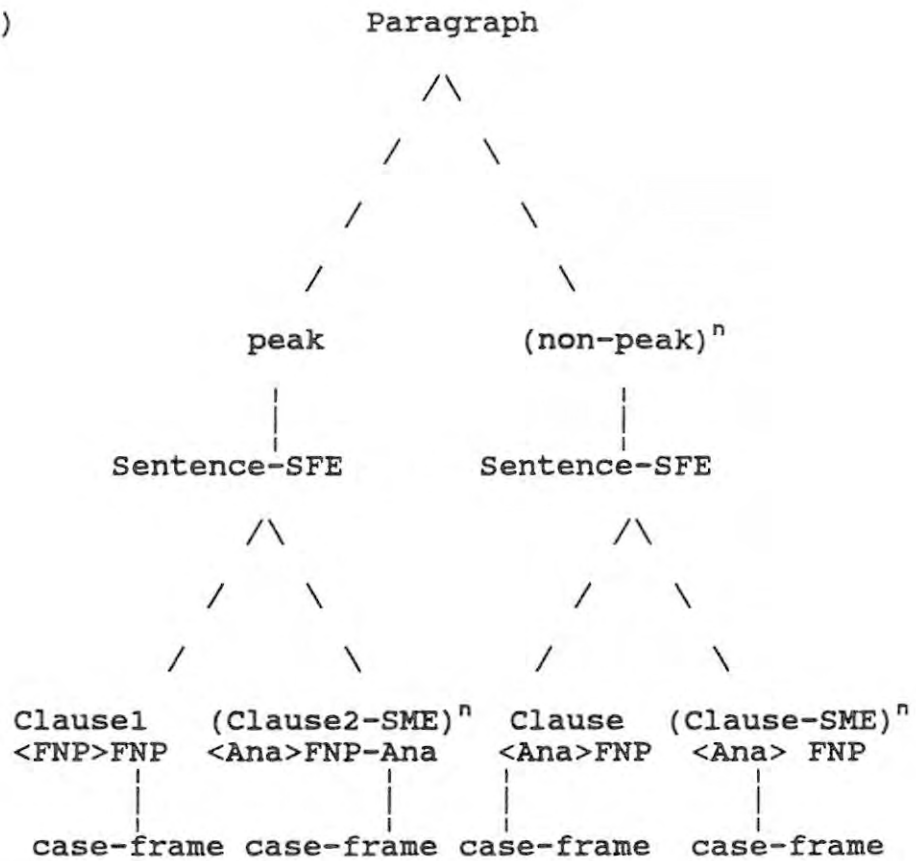
5.4. Summary

This chapter has discussed how discourse structure and discourse style work for the anaphora option. We propose that

② Korean narrative discourse consists of three levels: the clause, the sentence, and the paragraph. | Clauses, as the basic information processing unit combine into a center of interest, a sentence. *linguists have found that there are structure discourse is structured as a sentence is structured.* Sentences that are more closely connected in content further combine into a paragraph.

Within a paragraph, a peak sentence and a number of optional non-peak sentences are found. Sentences cluster into a thematic paragraph and thematic paragraphs combine into a larger coherence unit, a discourse. | The more explicit an anaphoric form is, the better chance it stands to occur in peak sentences. When a topic changes, a new paragraph starts with a full NP for the introduction or reintroduction of a thematic participant, i.e., a topic.

(24)



where < > indicates topic

SFE = Sentence Final Ending

SME = Sentence Medial Ending

FNP = Full NP

Ana = Anaphor

n = 0 or any integer

In sum, the Korean discourse/paragraph structure is sketched out in (24). The topic appears as a full NP in the first clause of a peak. When it reappears in the same paragraph, it does in the form of an anaphor, more likely a zero in the same sentence than in another one. A non-topic appears as a full NP for the first time and as an anaphor subsequently when there is no competition from the topic (as in clause 2 above). Otherwise, it must be a full NP.

If style is considered, the pronoun ku is restricted to written narratives rather than spoken, and to neutral narratives rather than honorific.

In the following chapter, conditions beyond discourse structure are discussed.

Notes

1. Our interest is mainly in the narrative discourse type in this study.
2. Maybe "clause" is a better term than "phrase" here. As Chafe says, it is usually characterized by a case frame syntax.
3. As far as I know, no attempt has been made to describe Korean discourse structure. At this stage, it is assumed that Korean discourse roughly corresponds to Japanese discourse in structure.
4. Korean has no structures like non-restrictive relative clauses. Such English clauses are usually translated by coordination in Korean.
5. Sentence-final endings do not necessarily correspond to sentence-final clause endings. In rare cases, the sentence final clause may be preposed to stress its content, then the clause without such a marker is shifted to the sentence final position.

6. Studies on such sentence medial clause endings have been of great interest to native Korean linguists, since such endings show very interesting semantic variations. Song (1983) is one of the studies on such endings. He calls such endings "conjunctor."

7. Although Korean is basically an SOV language with a rather flexible word order, the position of the verb (mostly the main verb) is fixed at the end of a sentence. The subject and the object are to some extent free in their order. This certainly has to do with which of the two is more topical. (cf. Kim, 1983)

8. Written and spoken narratives do not fully coincide with formal and informal, respectively. However, formal narratives tend to have characteristics of the written narrative, while informal narratives closely resembles the spoken narratives in many respects.

9. The conversational recordings are transcribed in the Appendix B.

10. Korean uses two distinct final suffixes for each of the categories of interrogation, imperative, and declarative to set apart spoken and written styles.

11. The three-way distinction is taken from Lee (1974).

12. Lakoff (1972) gives more details about honorifics.

CHAPTER SIX BEYOND DISCOURSE STRUCTURAL CONDITIONS

So far we have examined structural and stylistic factors affecting anaphoric options. This chapter considers semantic and pragmatic coherence which affects anaphora options within discourse. Furthermore, some cognitive factors are considered. Specifically, we discuss how human cognition limits possible referential systems in languages, and how semantic and pragmatic coherence affects the speaker's choice of different anaphoric forms.

6.1. Cognitive Conditions

In normal discourse, the speaker knows, before making reference to any particular entity, whom or what he has in mind. Then he presents a narrative, based upon his assessment of the hearer's state of knowledge at any given moment with respect to a particular referent. When it becomes difficult for the hearer to identify the referent mentioned, the speaker has failed to perform effective communication by appropriate reference. One of the factors which interrupt the correct identification of a referent is referential ambiguity. This arises because a number of other referents are mentioned between references or a

certain amount of time has passed since the last mention of a referent. Clancy (1980) regards such interference by other referents and time as cognitive factors which would condition the distribution of various anaphoric forms. These factors reflect the human cognitive ability and constraints. In other words, if the human mind is capable of dealing with only a limited number of different references at a time, then such limitation will surely affect the choice of anaphoric forms. She also claims that these cognitive factors are universal.

In addition to the avoidance of referential ambiguity, there are other human cognitive abilities which might be responsible for an the unusual referential choice. One of them is the speaker's point of view. That is, according to Chafe (1976), the role of a particular character within a discourse may influence the speaker's way of referring to that character. Thus, for example, the main participant may have a stronger hold on the status of old information than other participants. In Korean, for example, caki may be used to show the speaker's particular point of view with respect to a certain participant.

We will first examine how time and interference condition the distribution of anaphoric forms, and thus, how the speaker chooses an anaphoric form to avoid possible referential ambiguity. Then the speaker's point of view will be discussed with regard to the special use of caki.

6.1.1. Avoiding Ambiguity

A speaker tries to avoid referential ambiguity, which can be caused by time interval and interference of other referents between two mentions of the same referent, to facilitate a communication with a hearer. To see how the effect of time intervals and interference are reduced by anaphoric forms, we need to examine such time intervals and interferences in terms of linguistic structure. In counting time intervals between two mentions of the same referent, it is reasonable to use as a yardstick some unit of linguistic structure, such as the number of intervening clauses.¹ As a measure of interference, the number of references to other participants which occur between two mentions of the same referent is counted. Strictly speaking, what is being measured in counting the clauses separating two mentions of a referent is actually another type of interference.

Thus the distribution of anaphoric forms is described in terms of two measurements, the number of clauses between two mentions of the same referent and the number of other referents intervening between them. The former is taken by counting clause boundaries, i.e., if a particular referent was mentioned in one clause and mentioned again in the immediately following clause, the count is "1." If the same referent appears twice within one clause, as in English genitive pronouns and the subject pronouns, the count is "0." For example:

- (1)a man goes by with a goat.
and that's the last you see of him.
and then ... this ... little boy ...
 is riding by on his bicycle.

(Clancy 1980:157)

In the above clauses, "the little boy" appears twice in the last clause, a subject full NP this little boy and the genitive pronoun his, thus the number of clauses between the two mentions of the same referent is "0" here.

Interference is measured simply by counting the number of other referents mentioned between any two references to the same character.

The following Figures (6-1) to (6-4) show the distribution of different anaphoric forms in some Korean discourses, with respect to time and interference. Since the initial NP, which usually introduces a referent into a discourse, has no antecedent to refer to, the first clause where it appears is not counted as an intervening clause.

In counting the number of clauses separating two mentions of a referent, relative clauses, which in Korean precede their head noun, were not counted as intervening clauses. That is, the head nouns of relative clauses were treated as being "shared" by the preceding relative clause and the main clause in which the head noun functions as an argument of the verb.

Among the third person anaphoric forms, caki and ku salam are not included in the analysis here, because of their special function and also because their occurrences are extremely infrequent in any discourse.²

The following figures summarize the relevant facts. The ordinate shows what percentage of the total occurrences of a particular anaphoric form fall within the limit specified by the numbers. Thus, in Figure (6-1), we can see that 10 percent of all full noun phrases occur after one clause has elapsed from the last mention of the referent in question, and no full noun phrase is found in the same clause or in the clause immediately following the last mention of the referent. Similarly, Figure (6-2) indicates that 44 percent of all full NPs occur with no intervening mention of any other participant, and 33 percent following the mention of another participant.

The following figures indicate that the factors of time and interference correlate significantly with the distribution of anaphoric forms.³ The great majority of zero-anaphors occur within the immediately following clause (83 percent in (6-1) and 86 percent in (6-3)), and with no intervening participant (83 percent in (6-2) and 83 percent in (6-4)). As the number of the intervening clauses and that of the intervening

Text: Cinlo: Heyngninkwa Tongsaynquy Ssawum "The Fight between Brothers." (Kacengcosen, June, 1986, pp. 288-90).

Total Number of Anaphoric Forms:

Noun = 9

Pronoun = 8

Zero anaphora = 24

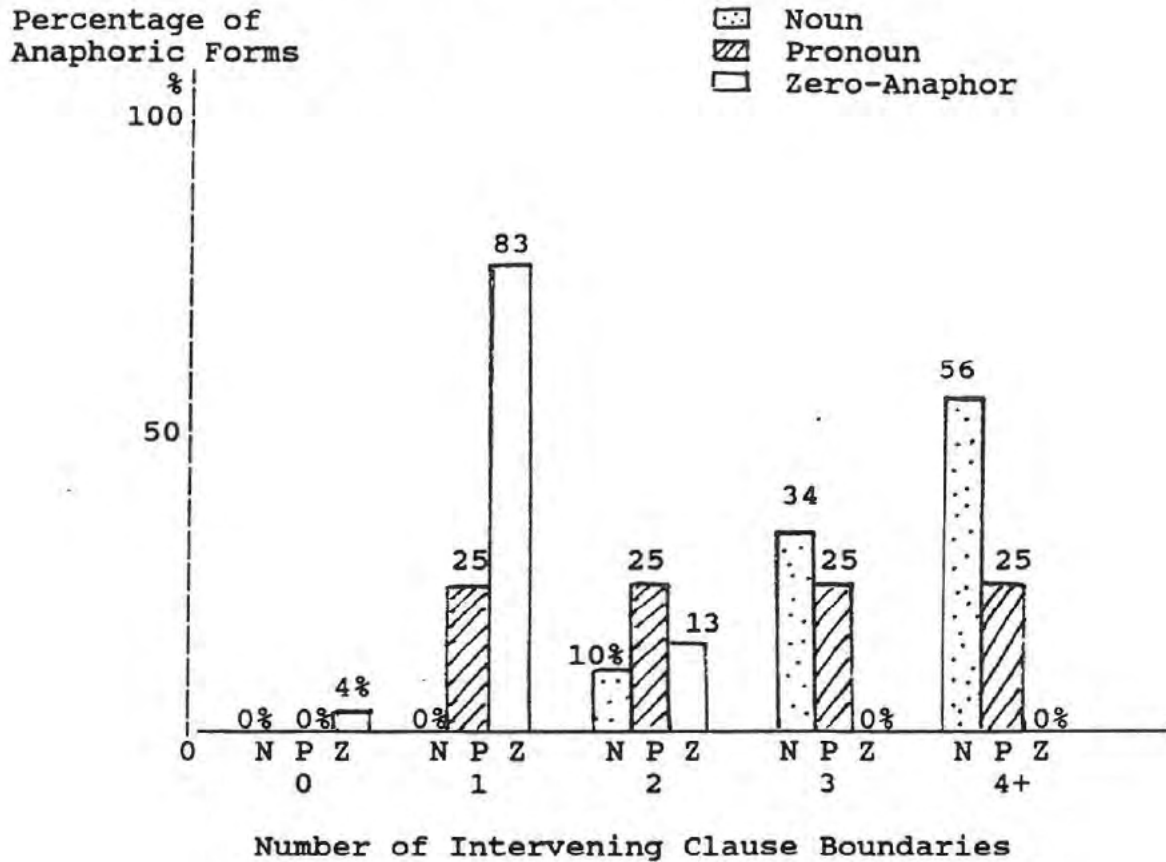


Figure 6-1 Number of Intervening Clauses Between Two Mentions of a Participant.

Text: Cinlo: Heyngninkwa Tongsaynguy Ssawum "The Fight between Brothers." (Kacengcosen, June, 1986, pp. 288-90).

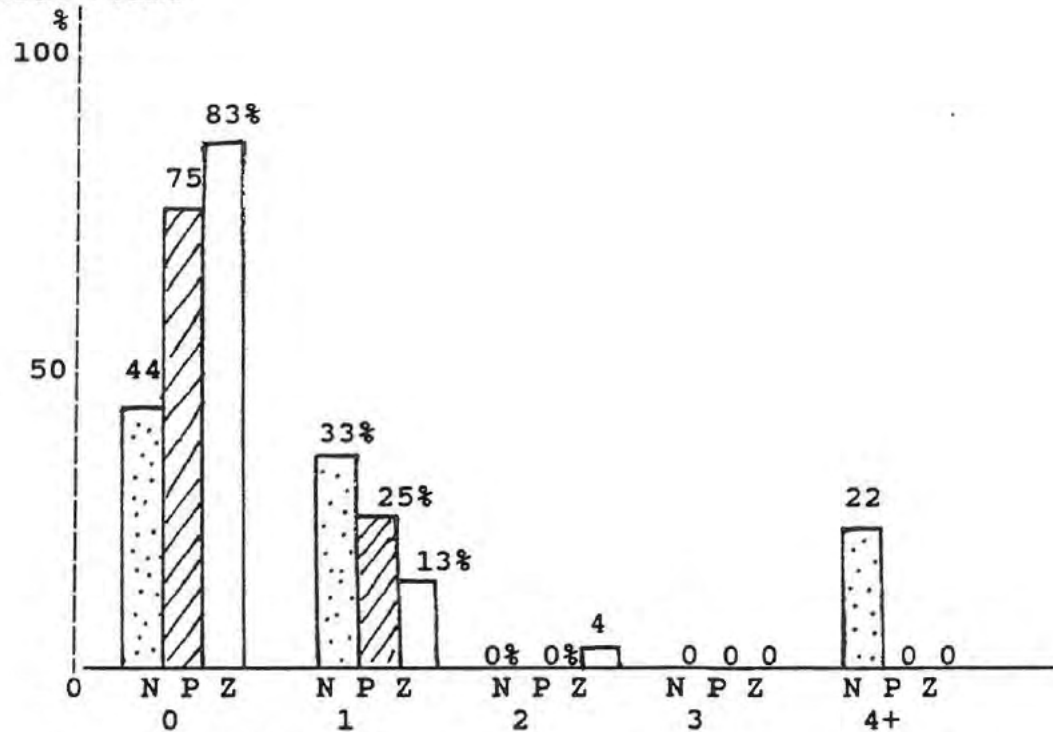
Total Number of Anaphoric Forms:

Noun = 9

Pronoun = 8

Zero anaphora = 24

Percentage of
Anaphoric Forms



Number of Intervening Participants

Figure 6-2 Number of Intervening Participants Between Two Mentions of a Participant.

Text: Phansolikalak cikhye Osipnyen "The fifty years of keeping Phansoli" (Sintonga, March, 1981, pp.261-67)

Total Numbers of Anaphoric Forms:

Noun = 12

Pronoun = 4

Zero anaphor = 35

Percentage of
Anaphoric Forms

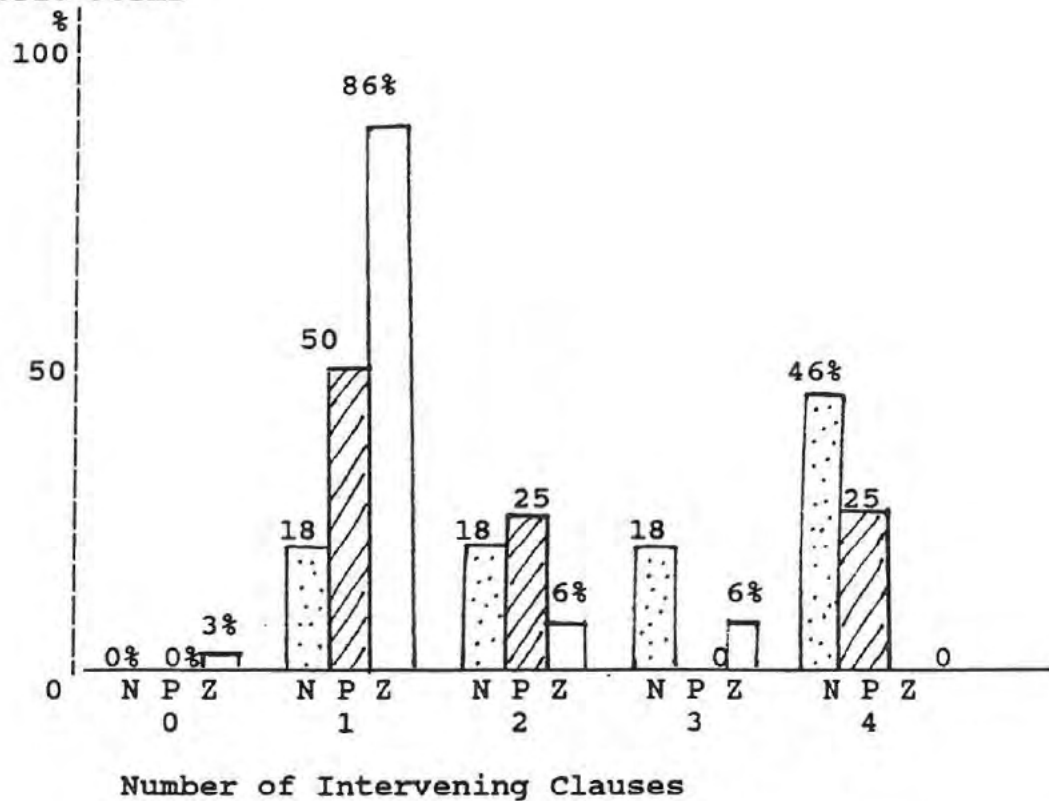


Figure 6-3 Number of Intervening Clauses Between Two Mentions of a Participant.

Text: Phansolikalak cikhve Osipnyen "The fifty years of keeping Phansoli" (Sintonga, March, 1981, pp.261-67)

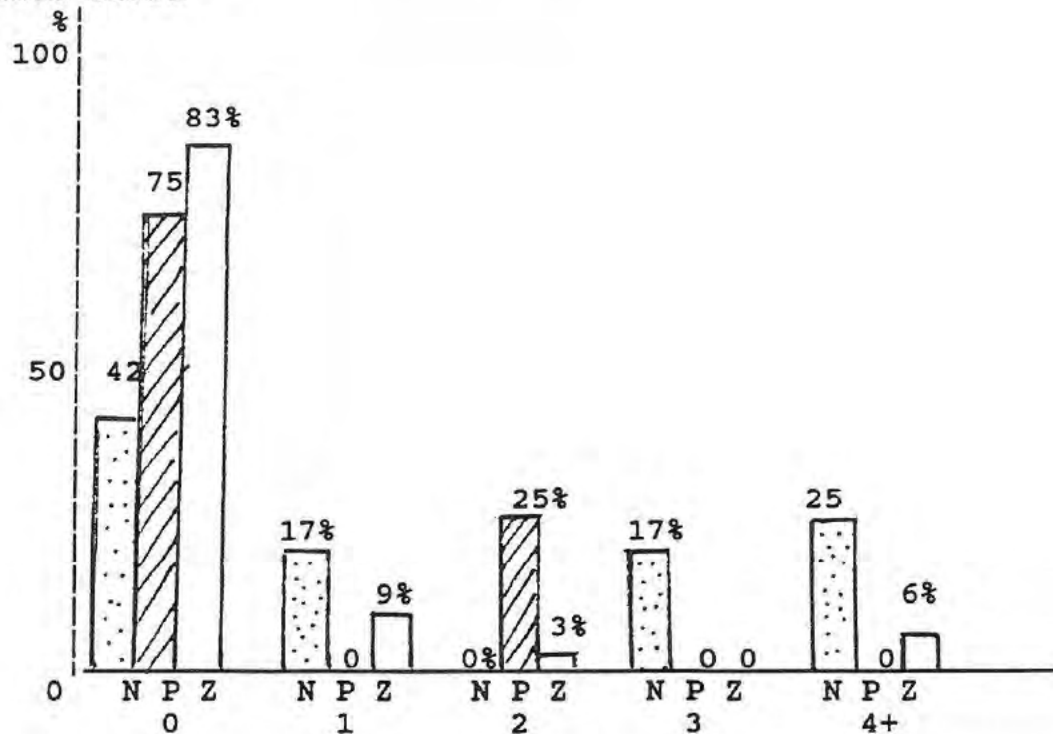
Total Numbers of Anaphoric Forms:

Noun = 12

Pronoun = 4

Zero anaphor = 35

Percentage of
Anaphoric Forms



Number of Intervening Participants

Figure 6-4 Number of Intervening Participants
Between Two Mentions of a Participant

participants increase, the percentage of zero-anaphors drops sharply. Furthermore, the zero-anaphor does not occur when the number of intervening clauses is greater than three, (6-1), or four, (6-3), and when there are more than three intervening participants, (6-2) and (6-4).

In contrast, the more explicit forms, i.e., nouns and pronouns, appear significantly less frequently in the positions where the majority of zero-anaphors occur (25 percent of pronouns and 0 percent of nouns in (6-1), 50 percent of pronouns and 18 percent of nouns in (6-3)). They are more frequently found where the numbers of the intervening clauses and interfering participants between two mentions of the same participant are larger. Thus, when there are more than four clauses from the last mention of the same participant, nouns and pronouns are still used to refer to the participant. And when more than three participants intervene between two mentions of the same participant, only nouns appear. This shows that nouns are used more often than the pronouns where any ambiguity might arise. In such positions, no zero-anaphor is found except in (6-4), where only 6 percent of all zero-anaphors so occur. At this point, it is not clear why such an exceptional case is found.

The pronouns, which are between zero-anaphor and full NP in explicitness, also stand between the two extremes in distribution in most cases. The percentage of pronouns is significantly lower than that of the zero anaphors within the

immediately following clause (25 percent vs. 83 percent in (6-1) and 50 percent vs. 86 percent in (6-3)) and where there is no intervening participant (75 percent vs. 83 percent in both (6-2) and (6-4)). But on the other hand, their percentage is significantly higher than that of full NPs in those same positions.

From the above figures, we can see that there is a rough tendency for the zero-anaphor to occur more often where the numbers of intervening clause boundaries and intervening participants are small, but full nouns are more likely to occur than the other forms when the numbers become larger. Ku seems to be in the middle.

However, it is hard to tell whether in a given discourse the frequency of occurrence of nouns and pronouns actually decreases where the numbers of intervening clauses and participants increase. It is rather obvious, though, that time and interference cannot explain all the choices of anaphoric forms, because nouns are used fairly often even when there is no intervening participant and after one clause from the last mention of the particular participant. Thus, at this stage the variations are not completely regular. It may be because of other conditioning factors. Further investigation into the inter-relationships among the conditioning factors is needed for future study. One of these conditioning factors is speaker's viewpoint, which will be discussed in the next section.

6.1.2. Speaker's Point of View

Chafe (1976:54) notes the following on the basis of Kuno's notion of empathy (point of view): The cognitive basis for the point of view appears to lie in the fact that people are able to imagine themselves seeing the world through the eyes of others as well as from their own point of view, and that this ability has an effect on the use of language.

Grimes (1975) presents a rather detailed concept of what viewpoint is like.⁴ He defines it as the rule for proper management of the speaker's picture of what is inside the heads of the persons whom he is talking about. He also discusses four kinds of viewpoints: an omniscient viewpoint, the first person participant viewpoint, the third person subjective viewpoint, and the third person objective viewpoint.

Under the omniscient viewpoint the speaker considers himself to have complete access to all that the participants perceive or feel. In the first person participant viewpoint, the speaker himself is or imagines himself to be one of the actors and he can't tell what the other participants think or remember. In the third person subjective viewpoint, the speaker has access to one participant's mental data, so that he can only say what the person whose eyes he is using can see and hear. The third person objective viewpoint is the most completely external viewpoint in the sense that the

speaker says things around one character, but denies himself access to what that character thinks and feels.

Among the third person anaphora, caki is used to refer to the third person participant when the speaker empathizes with him/her. In the first person point of view, since the speaker does not empathize with anybody except with himself, his attitude toward the third person participants is very objective. Therefore caki is hardly used in this situation. Instead ku and the other anaphoric forms are used.

In the third person objective point of view, the speaker does not empathize with any third person participants either, because he has an objective viewpoint of them. Therefore caki may not appear to refer to the third person participant in this situation, either. Only ku and other anaphoric forms are used.

The third person subjective point of view is always fixed on one participant, usually a main character. Therefore caki appears to refer to the main character to show the speaker's point of view. Ku is also used to refer to any other third participant as well as the main character.⁵

In the omniscient point of view, the speaker empathizes with any participant and can move the point of view from one person to another.⁶ Therefore caki appears to refer to third person participants whenever the speaker empathizes with one particular third person participant. The verbs or the voices

of sentences support this observation in the following examples.

(2) Kuttayey yeylusalemul pilothaye yuta kak
cipangkwa yodan kang pwukunuy salamtul_i ta
yotan kangulo yohan_jul chaca kase Ø_i caki_i
coylul kopaykhamye Ø_i Ø_j seylyeylul
pattatta.

(2') 'People_i came to him_j from Jerusalem, from the whole province of Judea, and from all over the country near the Jordan River. (They_i) confessed self_i (their) sins, and he_j baptized them_i in the Jordan.'

(3) 1. Tuyey an ilintey C_i-nun kuttayey
Kapsansilepuy Mochelcwu hwoycangul manako
issetta.

2. Ocencwung yucaymyeng_j-i sacangsileyse naoci
annun kesul an C_i-nun caki_i-ey kwanhan simkakan
uynon-i itnun kesulo cimcakhako Ø_i
Yucaymyeng_j-uy Kapsansilep phakoykongcak-ey
kwanhan cwungtaycalyolul etenayl
cakcongiettenketsita.

(3') 1. 'At that time, C_i met the president of the Kapsan corporation.

2. 'He_i knew that Yucaymyeng_j was in the manager's office all morning, because, (he_i) thought that they talked about himself_i seriously, (he_i) decided to get some evidence that Yujaemyong_j is going to destroy the Kapsan corporation.'

In (2), caki refers to salamutul 'people.'⁷ That is, "people" get the speaker's point of view. This fact is further strengthened by the passive construction of the Korean version which involves caki: the last clause in (2) can be translated literally as "(they) confessed (their) sins, and (they) were baptized (by John)" as in (2'). Kuno (1976) points out that it is hardest for the speaker to empathize with the referent of the "by-agentive," while it is easiest for the speaker to empathize with the referent of the subject. Therefore passivization is one device to show the speaker's apparent point of view, or to switch the speaker's point of view from one person to another. Actually the discourse preceding (2) was said from John's point of view, and (2), from the people's point of view.

In (3), caki refers to C. Although he is not a main character in this novel, The Golden Gate (by Lee, Pyong-cu), this passage is narrated from C's point of view. This fact is clearly shown by the verbs underlined: cimcakha- 'think,' an- 'know,' and cakcengha- 'decide.' The author tells what C thought, knew, and decided.

The following example shows the most typical use of caki in a discourse which focuses the speaker's point of view on the main character.

- (4) Swunok_i-un Oknam-uy ip-eyse mwusun mali
 naolyena kukesi maumi coyetta. Caki_i-ka

Oknam-uy namphyentoynun anpin-ul samohantakilo
 Ø kukesi Oknameykey tayhaye mwusun coyka toyl
 kesun eptako sayngkakhamyenseto, Ø, mwuetsinci
 molukey maumey kwulhanun paka itnun kesi
koylowatta. Tekwuna Oknam-uy taytanhi
 yeyminhan nuni caki_i-lul palapol-ttaymyen Ø,
 etten appakul ani nukkilswuka epta. Oknam-un
 Swunok_i-pota naika sipyenye wikeytciman naiman
 anila motun ketsey caki_i-potanun swuka nophase
 tocehi caki_i cekswuka ani toynun ket kathatta.
 Ø kukesi yakkan sepsephakeyto nukkyeciatta.
 Ø Anpin-uy nopko kiphun simkyeng-ul alacwul
 himul kacin inun ocik caki_i ppunikilul
palanuntey onul manapon insangulo pomyen
 Oknamun caki_i-pota hanchung te anpinul alapol
 salamin tuthaki ttaymwunietta.

(The Love: by Lee, Kwang-soo, 1966).

- (4') 'Swunok_i is nervous from wondering what Oknam would say. Although (she_i) thinks that self_i(her) loving Oknam's husband Anpin cannot be a sin (against Oknam), (she_i) is suffering from something vague in mind. Yet, whenever Oknam's sharp eyes are looking at self_i(her), (she_i) cannot help feeling some pressure. Oknam does not seem to be self_i(her)'s rival, because Oknam is almost ten years older than Swunok_i, and everything (of Oknam) is better than self_i(hers). (She_i) feels sorry about that. Although (she_i) has wished that self_i(she) is the only person who could recognize Anpin's great personality, Oknam seems (to her_i) to be the person who recognize Anpin's personality better than self_i(her).'

Example (4) expresses Swunok's internal emotions about Oknam. The underlined verbs all show the subject's internal feeling, thought, and emotion. The author consistently uses caki to refer to the main character Swunok. In the English version, caki is translated into self with she or her in the following parentheses. In other words, the English translation would use the regular pronouns in those positions where the Korean version has the reflexives. On the other hand, the plain pronouns in the parentheses without an accompanying self in the English version correspond to zero-anaphors in the Korean version.

From the above comparison between Korean and English discourses, we conclude that it may be a language specific phenomenon that the speaker's point of view controls the occurrence of the anaphor caki.

As we briefly mentioned, one thing common to anaphoric options in various languages with respect to the speaker's point of view is that the main character may have a stronger hold on the status of old information than other characters. This is mainly because the main character is always obvious through a discourse and the writer/speaker sees the situation and other participants through the main character's eyes. Therefore it is not necessary to use a more explicit anaphor such as a full NP. This is true in English (Chafe 1976, and Clancy 1980), in Japanese (Clancy 1980), and in Chinese (Li 1985). In a parallel fashion, Korean also uses inexplicit

anaphora in novels where a third person is the main character. The following is an excerpt from a novel to illustrate such a case.

(5)Melikhali kin yeca_inun khetalan

kominhyengul pwutungkhe anko (camcako)
itsetta. Ku_inun Cwunho_jka eti ittnunka
twulepoatta.

Cwunho_jnun sopha wieyse Ø_j tamyolul tuycipe
ssuko camtule issetta. Ø_i Ø_j melimathey
ppangpwusulekika pwusecyeitnun kesulo poa, Ø_j
amato mwuesinka mektaka camitulepelinkesi
pwunmyenghayssumye, kukesulo ku_i-nun Cwunho_j-ka
kanpamey mopsi malihwuanalul phiwettanun kesul
alswu issetta. Ku_jnun malihwuanalul phiwumyen
mwuesitun mekulye hayssumulo. Ku_i-nun
Cwunho_j-ka malihwuanalul phiwunhwu han pawunduuy
ppangkwa haymsayndwichilul sey kay
kkwuyekkkwuyek meknun ketsul pon ceki itta.
Ku_i-nun Cwunho_j-uy melilul huntuletta. Ku_j-nun
swipsali nwunul ttuci anatta. Ku_inun simhakey
Cwunho_j-lul huntuletta. Cwunho_j-nun kansinhi
Ø_j nwunul ttetta. (Kipkophwulun Pam, p.10).

(5')A girl_i with long hair was sleeping
hugging a big teddy bear. He_i looked around to
see where Cwunho_j was.

Cwunho_j was sleeping with a blanket on (his_j)
head on a sofa. (Because he_i) found that pieces

of bread were scattered around (his_j) head, so (he_i) knew that (he_j) fell asleep when (he_j) was eating, and from that he_i realized that Cwunho_j smoked marijuana too much last night. He_j tends to eat when (he_j) smokes marijuana. He_i once saw Cwunho_j eat a pound of bread and three ham sandwiches at one time after smoking marijuana.

He_i shook Cwunho_j's head. He_j did not wake up easily. He_i shook him_j a bit more strongly. Cwunho_j barely opened (his_j) eyes.

In the above example, three participants appear. The main character_i, Cwunho_j, and the girl_n with long hair. Through the whole passage, the main character reflects back on his life as a writer when he is traveling in a car with Cwunho. Cwunho is sometimes referred to by the pronoun ku, the zero anaphor, or the full NP Cwunho, while the main character is always referred to by ku. Throughout the whole text of this novel of 99 pages, the main character is only referred to by ku or by the zero anaphor, but never by a full NP or the definite NP kusalam.⁸ Although this passage seems to be about Cwunho, the writer still empathizes with the anonymous main character. The writer sees and narrates the novel through the main character's eyes, by means of the inexplicit anaphoric forms referring to him. The claim that when a referent is more favored in the speaker's point of view, he/she receives a less explicit anaphoric form seems to be applicable Korean.

6.2.Semantic and Pragmatic Coherence

A discourse may be briefly defined as an utterance type of natural language which realizes a sequence of sentences satisfying a number of properties. In addition to relative grammaticality of sentences at the syntactic level, one of the most conspicuous properties defining the "textual" nature of a sequence of sentences expressed by a discourse, is the semantic property of coherence.

Such semantic and pragmatic coherence of a discourse is called "continuity in discourse" by Givon (1982). Of course, this coherence defines the delimitation of a discourse with respect to previous and following discourses. Thus it certainly is related to what we discussed as discourse structure. In what follows, such continuity is discussed in terms of how it is coded by anaphoric forms in discourse.

6.2.1.Continuity in Discourse

The term "continuity/discontinuity" in discourse was proposed in Givon (1977), and was further elaborated in connection with anaphoric forms in Givon (1982). Basically, Givon (1982: 53-54) holds that there are three major levels of continuity in discourse: thematic continuity, action continuity, and topic continuity. The highest level, thematic continuity, pertains to the structure of discourse above the thematic paragraph and makes a whole discourse coherent. Action continuity and topic continuity most often go hand in

hand and are intimately involved to define the structure of the thematic paragraph and sentences/clauses. Thus major paragraph breaks tend to signal both action break and topic change. Each clause/sentence in a discourse may have one or more topics plus the verb or predication.

Action continuity is the domain of changing verbs/predications one after another within the thematic paragraph in a way that coheres. The tense-aspect-modality system, most commonly found as verbal bound morphology, takes the primary responsibility for this continuity. Thus, action continuity (with such verbal morphology) marks clauses as either background or foreground clauses. Foreground clauses tend to maintain the sequence of action continuity, while background clauses tend to be outside of it.

On the other hand, topic continuity is usually represented by participant arguments in a way that a recurring participant argument tends to be the topic of a thematic paragraph. That is, it tends to appear in each successive foreground clause of the paragraph. However, at different points within the thematic paragraph it has different continuity values. Obviously, in paragraph-initial position it breaks up the continuity of the preceding paragraph-dominant topic-chain. It is thus "discontinuous" at that point. It is also at that point that a totally new topic (represented by an indefinite NP) or a reintroduced topic (represented by a definite NP) after a long absence

appears. Any topic--first-introduced, reintroduced, or continuous--may appear in contexts where another topic may be present in the same verbal clause or its immediate discourse environment. The presence of more than one topic, especially when they share the same person, gender, and case frame, can create topic ambiguity and thus increase the difficulty of topic identification. To minimize such topic ambiguity, different syntactic devices may then be used.

Although there are many syntactic devices for topic continuity including anaphoric forms and grammatical constructions such as cleft constructions, Y-movement, word-order change, passivization, etc., the main concern of the present study is anaphoric forms and their way of coding continuity. On the other hand, the choice of anaphoric forms seems not only a manifestation of topic continuity, but also that of action continuity.

At this point, however, it is not clear how anaphoric forms are used to code action continuity or how they are related with thematic continuity, although topic continuity and action continuity are often inseparable. Therefore, we concentrate only on how topic continuity is coded by anaphoric forms in this study.

Givon (1983:56) presents a scale of topic continuity coded by anaphoric forms, which is claimed to have passed the widest cross-linguistic attestation. The following scale is adopted from Givon (1983) to suit the Korean system.

(6)

Highest Continuity

zero anaphora
 unstressed pronoun
 stressed pronoun
 definite NP (kusalam)
 full noun

Highest Discontinuity⁹

In what follows, each contiguous pair on the above scale will be examined in Korean, not only to ascertain their functions for continuity, but also to confirm the validity of the scale.

6.2.1.1. Zero anaphora and unstressed pronoun

The English discourse example (7) illustrates a fairly good idea of how zero anaphors and unstressed pronouns code continuity in discourse. All the pronouns are unstressed.

- (7) a. He came into the room, Ø saw Mary, Ø
 pulled up a chair and Ø sat down.
 b. She seemed tired, he thought.
 c. He relaxed.

(Givon, 1982:57)

It is obvious that the participant topic in (7) is "he." In (7a), we find the highest degree of continuity for the subject he because the subjects in the subsequent clauses are Ø. The intrusion of the full NP, Mary, does not break the continuity, since the first NP, he and its coreferring zero

anaphors all occupy subject slots; Mary occupies the object position. The sentence is thus marked by zero anaphora for the highest continuity. In (7b) there are two successive subject switches: that is, the subject switches to Mary at first, and then it returns to he. However, there is no topic discontinuity here, because she seemed tired is an indirect quotation of what he thought. Nevertheless, no zero-anaphor appears in the second subject slot of (7b), because there is a minor break in the meaning of the sentence (7a) and (7b), i.e., a switch from the physical action by the topical participant to his mental state. Furthermore English does not allow subjectless sentences. Thus the anaphoric form for the second highest continuity, the unstressed pronoun, is used. By the same token, in (7c) too, the topic still continues, but an unstressed pronoun is used there instead of a zero anaphor, because the narrative moves from the mental state of the participant back to his action this time. This again calls for an unstressed pronoun. It is thus beyond doubt that unstressed pronouns in English are used where there is a minor semantic break.

Givon states that languages like Spanish lack the use of zero anaphora and languages like Korean lack unstressed pronouns. Thus Spanish uses only obligatory pronominal verb agreement in cases like the above, while Korean uses only zero anaphora. However, this is not always true in Korean. Consider (8) below, which is a Korean translation of (7).

In (8), all unstressed pronouns in the English version in (7) are replaced by zero anaphora in Korean to see whether Givon's claim is right that Korean uses only zero anaphora for such topic and action continuity.

- (8) a. Ku_inun pang-ey tulewase, Ø_i Mary_jlul poko,
he TO room LO came in DO saw

Ø_i uyca-lul tangkyese ancatta.
chair DO pulled sat-down

b. Ø_{i/j} phikonhay pointako Ø_{i/j}
tired be seen

sayngkakhaytta.
thought

c. Ø_{i/j} swietta.
rested

Since the first NP, ku, and its coreferring anaphors all occupy subject slots in (8a), the zero-anaphor is selected to mark the highest continuity, just as it is in English. However, zero-anaphora in both (8b) and (8c) are ambiguous, because of the semantic break between (8a) and (8b) and between (8b) and (8c), as mentioned for the English version. In (8b), the first zero should be replaced with the full NP Maryka to correspond to the meaning of the English version. Otherwise, it is hard to pin down the coreference relation of the subject. Sentence (8c) is again ambiguous with the zero anaphor because of the semantic break. As a matter of fact, it is now impossible to determine which participant is the topic through the passage with the zero-anaphors in (8b) and

(8c). The problem here is of course confounded by the fact that no gender distinction is made with the zero anaphor.

What we need to demonstrate, then, is that the Korean zero anaphor appears only where topic continuity prevails and there is no semantic break. The passage in (9) illustrates this point.

(9) a. Ku_i-nun wuli kwukeey tayhan aychaksimul kaciko
 Ø_i wuli kul-ey tayhan samyeng-ul kkaychinketto
 ppalatta. b. Ku_i-nun imi yelilkopsal mwulyep (1982)
 hanmwun setangeyse kongpwuhal ttay, Ø_i hanmwunuy
 ttusul haysekhalyemyen pantusi wuli mallo
 penyekhanmul poko, Ø_i "kul-un mal-ul cekumyen
 kumanita." lako sayngkakhaytta hanta. c. Kulihae
 ku_i-nun hanmwun-ul paywunun kesun sitayka yokwuhanun
 hakmwun-i aniyo, sikan-man nangpihamilako
 kkaytalatta. d. I kesi ku_i-ka wulimal kul yenkwuey
 ilsayng-ul pachin tongkiyetta.

(9') a. He_i became attached to his own language (Korean), (he_i) quickly realized (his_i) duty for Korea. b. When he_i studied Chinese literature in an old-fashioned institute at the age of 17 (1892), (he_i) realized that Korean translation was necessary for understanding Chinese, (he_i) thought that the Korean writing system was more efficient than the Chinese one (for Korean language). c. Therefore he_i realized that learning Chinese characters did not follow the modern trend and was a waste of time. d. This is the reason/motivation that he_i devoted (his_i) whole life to the study the Korean language.

The topic, the participant represented by the pronoun ku, continues throughout the above passage. However, there are four minor semantic breaks that separate the four sentences from each other: (9a) provides a statement about his attachment to his own language and country; (9b) talks about how he began to realize the importance of his own language; (9c) shows his realization of what was wrong; (9d) concludes with why he became devoted Korean linguist. Note that, whenever a semantic break appears, the pronoun ku is used, while zero-anaphor is allowed only where no semantic break exists.

Thus, the Korean zero-anaphor appears only where topic continuity prevails and there is no semantic break, while the pronoun ku appears where the topic may be continuing but there is usually a minor semantic break.

6.2.1.2. Unstressed pronoun and stressed pronoun

Illustrating unstressed and stressed pronouns in discourse, Givon also remarks that in languages like Japanese, Korean, or Mandarin, the unstressed pronoun in the English examples below will still be coded by zero anaphora and the stressed pronouns by the independent pronouns, e.g., the pronoun ku in Korean. (1982:58)

- (10) a. John_i hates Bill_j, and he_i hates Mary.
 b. John_i hates Bill_j, and he_j hates Mary.
 c. John_i told Bill_j that he_j was an idiot.

The sentence in (10a) shows that a continued topic is coded in English by the unstressed pronoun, while a switched topic is coded by the stressed pronoun in (10b).¹⁰ In the case of (10a), the NPs being in the subject slots override mere proximity between Bill and he for topic continuity when the pronoun is unmarked by stress. In (10b) the pronoun is marked by stress and therefore disrupts the normal topic continuity for the only other possible coreference between Bill and he.

On the other hand, (10c) exhibits a high tendency for the first unmarked he to be interpreted as coreferential with the object rather than to the subject, because of pragmatic expectations. That is, a person is less likely to confess to another about himself being an idiot, but more likely to label the other as an idiot.

Now, let us see if Korean uses zero anaphora for unstressed pronouns and the independent pronoun for stressed pronouns, as Givon claims.

- (11) a. John_i-un Bill_j-ul silehako, Ø_i
 TO DO hate
 Mary-lul silehanta.
 DO hate

b. John_i-un Bill_j-ul silehako,
 TO DO hate

ku_{i/j/k}-nun Mary-lul silehanta.
 TO DO hate

c. John_i-ka Bill_j-ul silehako,
 ku_{i/j}-ka Mary-lul silehanta.

d. Johnun Billul silehako, Billun
 Marylul silehanta.

As Givon predicts, zero anaphora is used in the case of (11 a) where the same topic continues throughout the sentence. In (11 b), however, when the stressed pronoun is replaced by the Korean pronoun ku, it becomes three-way ambiguous here: There are three possible references for ku, that is, "John," "Bill," and "some other person" in the discourse, though with different degrees of likelihood. The coreference between ku and John is least likely, while the other two seem almost equally likely. In (11 c) where the first topic marker -un is replaced by the subject marker -ka, the pronoun ku corefers with Bill only. It is obvious, therefore, that ku alone does not work as the English stressed pronoun does. To express what (10b) does, a full NP has to be used as in (11 d). In (11 d), the full NP, Bill, seems to work as a stressed pronoun does in English. We have found that when a topical participant switches in Korean, a full NP, the anaphoric form for the lowest continuity, generally appears. The pronoun ku with the topic marker -nun can be also used to

mark such a switched topic as the stressed pronoun does in English. But there is still the possibility of its coreference with a third NP.

6.2.1.3. Pronoun and definite NP

In English, definite NPs are used to differentiate between otherwise ambiguous potential referents. For example,

- (12) a. He gave presents to the King and the General. The King thanked him but the General just grunted.
 b. He_i gave presents to the King_j, and he_j thanked him_i. (Givon 1982:59)

In (12a), two potential referents would have answered to the pronoun "he." In (12b), the two pronouns in the second clause also have two potential referents in the first clause. In both cases, the topic is switched. The main difference between them is that the former has a conjoined object. Whereas the stressed pronoun is sufficient for the discontinuity of topic in (12 b), in (12a) definite NPs must be used both to differentiate between two potential referents, the King and the General, and to indicate disruption in topic continuity.

The Korean version in (13) shows an interesting difference:

- (13) a. ?Ku_i-ka ku wang_j-kwa ku cangk_{wun}_k-eykey
 he SU the king CO the general IO
 senmwul-ul cwuetta.
 present DO gave
 Ku wang_j-un ku_i-eykey kamsahayttko ku
 the king TO he IO thanked the
 cangk_{wun}_k-un kunyang pwulphyenghaytta.
 general TO just grunted
- b. Ku_i-ka wang_j-kwa cangk_{wun}_k-eykey
 he SU king CO general IO
 senmwu-lul cwuetta. (ku) wang_j-un ku_i-
 present DO gave the king TO he
 eykey kamsahayttko (ku) cangk_{wun}_kun
 IO thanked the general
 kunyang pwulphyenghaytta.
 just grunted
- c. Ku_i-ka wang_j-eykey senmwu-lul
 he SU king IO present DO
 cwuetko, ku wang_j-un ku_i-eykey
 gave the king TO he IO
 kamsahaytta.
 thanked
- d. Ku_i-ka wang_j-eykey senmwu-lul
 he SU king IO present DO
 cwuetko, wang_j-un ku_i-eykey
 gave king TO he IO
 kamsahaytta.
 thanked
- e. Ku_i-ka wang_j-eykey senmwul-ul cwuetko,
 he SU king IO present DO gave

ku_{j/k}-nun kamsahaytta.
 he TO thanked

f. Ku_i-ka wang_j-eykey senmwu-lul cwuetko,
 he SU king IO present DO gave

ku_{i/j/k}-ka kamsahaytta.
 he SU thanked

The sentences in (13a) are just literal translations of (12a): all English definite NPs are replaced by Korean definite NPs, i.e., demonstrative + Noun. Even though the sentences in (13a) are all normal sentences, Korean speakers find the definite NP unnatural in the first sentence, perhaps because definite NPs must refer to referents that have been previously mentioned. In this instance, there is no previously mentioned referent for those in the first sentence. So we will not discuss this example further, because it is irrelevant. The other examples are more interesting.

The English passage (12a) has a more natural translation, (13b), where we find bare nouns without the demonstrative ku instead of definite NPs. In (13b), by repeating the bare nouns with no demonstrative, "the King" and "the General" serve as the referents for both occurrences in the first and the second sentences. Wang and Cangkwun are simply repeated for anaphoric purpose in the second sentence. If the bare nouns in the second sentence were replaced by the definite NPs, ku wang and ku cankwun, no difference would appear.

In (13c), which is a coordinate structure, the bare noun wang 'king' is introduced in the first clause, while the

definite NP ku wang co-refers with it in the second clause. (Note that we regarded a coordinate structure as a discourse in Chapter Three.) But, an anaphoric full NP without a demonstrative can just as well be coreferential with the identical full NP, as in (13d). This fact is also illustrated in (13b).

Now, consider (13e) and (13f), where the pronoun ku instead of the definite NP is used to refer to the first introduced referent. The pronoun with the topic marker nun in (13e) shows that the topic is switched. However the same pronoun with the subject marker ka in (13f) may cause ambiguity because it can be coreferential with the subject ku or with wang in the first clause. Thus, the pronoun with the topic marker works more like the stressed pronoun in English, while the pronoun with the subject marker works more like the unstressed pronoun in English. Furthermore, both pronouns in the second clause of (13e) and (13f) may refer to some other person beyond the sentence. The definite NP, ku wang, does not cause such ambiguity because it is more semantically loaded than the pronoun ku and the English pronoun he.

From the above discussion, we found that Korean definite NPs (i.e., ku + N) and bare nouns may have an identical function in cases like (13c) and (13d) or have a different function in cases like (13a) and (13b). Because of the lack of an article system, the Korean bare noun may work as either

a definite or an indefinite NP without any specifier. Thus definite or indefinite interpretations are determined by the context.

6.2.1.4. Summary of continuity and anaphoric forms

From our examination of the anaphoric forms we may draw a tentative conclusion in the following.

The choice of anaphors is partly determined by topic continuity in the discourse. Zero anaphor appears where topic continues; the pronoun ku is chosen where topic continues but semantic break occurs; either the same pronoun with the topic marker nun or a definite NP may show topic switch the same way as the stressed pronoun does in English; a definite NP can also refer to the referent represented by a previous topic when a new topic appears; and finally a full NP--definite or indefinite--is used to introduce a new topic or a new referent.

But, of course, many other factors interacting with topic continuity may also affect the choice of an anaphor in a discourse. The conclusion here represents tendencies rather than absolute rules.

Comparing with the English anaphoric system, we have found that Korean anaphoric forms do not exactly match the English ones in terms of their coding functions of topic continuity in discourse. The following scale shows a schematic comparison between the Korean and English anaphoric

systems as signalling devices for topic continuity. The cutoff points are only approximations.

English

Zero-anaphor		Unstr. pro.		Str. Pro.		Def. NP
<hr/>						
Zero-anaphor		Pronoun		Pro. with <u>nun</u>		def. NP full NP

Korean

<-----
 most continuous ----->
 most discontinuous¹²

6.2.2. Theme in a Text of Moderate Length

Sometimes, the pronoun ku, instead of an NP, may appear at the very beginning of a paragraph in a discourse text of moderate length. At first glance, this contradicts what we have discussed in the previous section, that is, a full NP introduces a new participant at the beginning of a paragraph. However, a closer look reveals that it is not a contradiction. Thematic continuity between paragraphs may allow the appearance of ku at a paragraph initial position. The following example gives an insight into how thematic continuity affects the choice of an anaphor at the beginning of a paragraph.

- (14) 1.Cwusikyengnim_i-un, kapokayhyek ihwuuy
 sinsaco-lul nwukwupotato ppali patatulin ket
 katta. Kuketun ku_i- ka yelahopsal toyten
 hayey kapokayhyeki ilenatnuntey, θ_i kuhaye

melilul kkakko Ø_i paycay haktangey tulekan
ketmanpoatoalswuitta.

2. Ku_i-nun wuli kwukeey tayhan aychaksimul
kaciko Ø_i wuli kul-ey tayhan samyeng-ul
kkaychinketo ppalatta. Ku_i-nun imi
yelilkopsal mwulyep (1892) hanmwun setangeyse
kongpwuhal ttay, Ø_i hanmwunuy ttusul
haysekhalyemyen pantusi wuli mallo penyekhamul
poko, Ø_i "kul-un mal-ul cekumyen kumanita."
lako sayngkakhaytta hanta. Kulihaye ku_i-nun
hanmwun-ul paywunun kesun sitayka
yokwuhanun hakmwun-i aniyo, sikan-man
nangpihamilako kkaytalatta. I kesi ku_i-ka
wulimal kul yenkwuey ilsayng-ul pachin
tongkiyetta.

3. Ku_i-nun paycay haktang-eyse sinhakmwunul
paywuko, Secayphil, paksauy citolul patatta.
Kuliko Ø_i swun hankul sinmunin
"toklipsinmwunuy kyopowonulo itkey toyetta.
Ø_i hanphyen yengelul paywumyense Ø_i uli
kulkwauy kongthongcemul mosaykhakito hako Ø_i
uli malponuy cekyong yepwuto yenkwu cinhayng
sikhyetta. Hanphyen, Ø_i kwuke yenkwuwa sacen
phyenchan saepul sangse kenuyhako, Ø_i kwukmwun
yenkwuso (1907) wiwoni toyetta. Tto talun
hanphen, Ø_i kwukekwukmwun pokupcalose,

kyoyukcalose, aykwukcalose, cengchikalo
 conghoyngmwucin hwaltonghayessuni, 1910 nyeney
 naon ku_i-uy "kwukemwunpep"-un ilehan
 nalasalanguy cengsinkwa senkakcacekin
 sasangey thecapa ilwuecin kesila hal swu
 itta.

4. Ku_i-nun silo wuli kuntay mwunhwasawa
 cengsinsa sangey han khun kumul kutnun
 senkakcala anihal swu epta. Ku_i-uy
 cengsingkwa hakmwunun kutaylo ku_i-uy
 hwukyeyca-in Oysol_k (Choyhyenpay)-kwa Hankyel_i
 (Kimyunkyeng)-tungulo ku mayki iecinta.

(14') 1. 'Cwusikyeng_i learned the trend of modern thought faster than others after the kapo reformation movement. That is evidenced by the fact that, when he_i became nineteen years old in the year the kapo reformation movement occurred, (he_i) cut his long traditional hair tail and entered paycay school (a new modern school).

2. He_i became attached to his own language (Korean), (he_i) quickly realized (his_i) duty for Korea. When he studied Chinese literature in an old-fashioned institute at the age of 17 (1892), (he_i) realized that Korean translation is necessary for understanding Chinese, (he_i) thought that the Korean writing system is more efficient than the Chinese one (for Korean language). Therefore he_i recognized that learning Chinese characters does not follow the modern trend and is wasting time. This is the reason /motivation that he_i devoted (his_i) whole life to study Korean language.

3. He_i learned modern art and science in paycay school, (he_i) was taught by Dr. Secayphil_j. Then, (he_i) worked for the pure Korean newspaper, Toklipsinmun (Independent Newspaper). On the one hand, (he_i) learned

English, (he_i) compared Korean with English, (he_i) examined the possibility of application of English grammar to Korean. On the other hand, (he_i) asked the government to support the study of Korean and the publication of a Korean dictionary, (he_i) became a member of the Institute of Korean (1907). Also, (he_i) worked actively as a leader of Korean Study, as an educator, and as a politician. Therefore, his_i "kwukemwunpep" (Korean Grammar 1910) was a product of (his_i) love for (his_i) own country.

4. He_i is a pioneer who gave a direction to our cultural and spiritual history. His_i spirit and work is followed by his disciples Oysol_k and Hankyel_i." (Cwusikyeng: by Kim, sokduk 1980).

This is an introductory narrative about a Korean linguist in the early twentieth century, Cwusikyeng. The four paragraphs constitute a short discourse. Although there are four paragraph boundaries, the NP, Cwusikyeng, appears only once at the beginning of the first paragraph. Since this is a very short discourse about one person, it shows a high degree of thematic continuity. Therefore, each paragraph starts with ku, a more continuous device than a full NP, without any ambiguity.

In sum, because (14) is a very short text, the theme of the whole text, a Korean linguist and his life, is obvious. Therefore a full NP is used to introduce the participant topic only at the very beginning of the whole discourse. Then ku is used to refer to the thematic topic, despite the breaks between paragraphs.

A relatively short discourse text, such as a short essay or newspaper article, usually tells about one topical participant. This topic then serves as the theme of the entire discourse text. As this topical participant is clearly the most salient in the discourse, there is no need to express him more explicitly than just by ku. Hence, the pronoun is used even at the beginning of each paragraph without ambiguity.

6.3. Summary

This chapter has discussed some factors beyond discourse structure and stylistic conditions. We have discussed two cognitive factors: i.e., avoiding ambiguity and the speaker's point of view. That is, the speaker tries to avoid ambiguity of reference to make the message clear. The longer the time interval and the interference between two mentions of the same reference are, the more explicit anaphoric form is needed. The speaker's point of view is a cognitive factor which enables the speaker to use the inexplicit anaphoric form for the participant with whom the speaker empathizes. Specifically, Korean uses caki in most cases to achieve this effect.

Semantic and pragmatic coherence in discourse is also aided by anaphoric forms. There are three kinds of "continuity": topic continuity, action continuity, and thematic continuity. Zero anaphor tends to

occur whenever a topic continues without any semantic break; ku is usually used when a topic continues, but there is semantic break. Ku with the topic marker nun and kusalam are used when the topic switches. Finally a full NP tends to introduce a new referent or reintroduce an old one into a discourse. In a discourse of moderate length, the full NP may not appear at each paragraph boundary. Instead ku may occur, because the theme of the whole text actually runs through all the paragraphs.

Notes

1. Clancy (1980) counts both intervening clauses and sentences for the same purpose. However, it seems that counting sentences is not as accurate as counting clauses. Thus, in this study, only the number of intervening clauses are counted.
2. The definite NP, ku salam, is not listed because it usually appears in spoken discourse where topics do not continue for a long time and change more quickly than in written discourse.
3. The number on each ordinate indicates the percentage of the appearance of a specific anaphor. That is, "0" on N(oun) in the first place in Figure 6-1 shows that 0% of the total number of nouns appears where there is no (0) intervening clause between two mentions of the same referent. These numbers of percentages are approximations.
4. Grimes (1975) uses a different term "viewpoint." It seems to be more general than Kuno's "point of view." Since Kuno defines his term as the speaker's attitude toward the participants of the event that he is talking about, it agrees with what we need.
5. The choice between caki and ku for the main character in this case seems to be governed by syntactic conditions. That is, caki generally does not appear in the subject position. However, we still find some examples where caki is in the subject position. This is still an unsolved problem. Also caki has the emphatic function of the reflexive pronoun in English.

6. It seems that it is hard to empathize with the hearer, especially in written narratives. Since this paper only deals with the third person, the viewpoint on the hearer is not discussed here.

7. The plural suffix -tul can be attached to ku, i.e., kutul, to indicate the third person plural. However ku alone can refer to a plural referent as well. So, the suffix -tul is not an obligatory plural marker.

8. There are some cases where the main character is referred to by hyeng "elder brother" in Cwunho's direct speech. In that case, hyeng is used as a second person NP, which usually means an "elder brother." Korean speakers usually avoid using the second person pronoun, especially when the addressee is older than the speaker. Instead, they call the second person addressee by title, or by a kinship term.

9. Givon's (1982:56) scale of major coding devices are as follows:

Highest Continuity

- a. Zero anaphora
- b. Unstressed/Bound pronouns or grammatical agreement
- c. Stressed/Independent pronouns
- d. R-dislocated Def. NP
- e. simple Def. NP
- f. L-dislocated Def NP
- g. Y-movement/contrastive topicalization
- h. Cleft/focus constructions

Highest Discontinuity

Later, Givon revised the scale with only anaphoric forms as follows (1983:18).

More Continuous/Accessible topics

Zero anaphora
Unstressed/bound pronouns ("agreement")
Stressed/Independent pronouns
Full NPs

More discontinuous/inaccessible topics.

We have revised it to suit the Korean system.

10. Notice that we considered the coordinate structure at a discourse level in Chapter Three. Though Givon used the terms "continued subject" and "switch subject," I think "continued topic" and "switch topic" are more appropriate here.

11. See Hwang (1983:56) for a similar figure.

12. The details of possessive ku-uy are not considered in this study. In Korean, possession may be realized as either a zero-anaphor or caki.

CHAPTER SEVEN CONCLUSIONS

Several conditioning factors for the selection of anaphoric forms in Korean have been discussed in a framework that integrates several different linguistic levels: syntax, semantics, and pragmatics.

It is discovered in a syntactic approach that the c-command constraint, a crucial notion in the binding theory of anaphora, though able to account for cases in a limited realm, is not adequate to apply to all the different third person anaphoric forms in Korean. Some other syntactic factors that also affect the selection are grammatical positions, their suggested hierarchy, precedence, and whether an NP is in an argument or non-argument position. In many cases these factors affect the anaphora selection more than does the c-command constraint.

As a result, several principles are proposed for the different anaphoric forms: the pronoun ku cannot be coreferential with the c-commanding subject of its minimal phrase; zero-anaphor must not be allowed in an argument NP position; a reflexive pronoun must be coreferential with an NP contained in a phrase which is higher than or equal to the phrase that contains the reflexive pronoun; the full NP

can corefer with another full NP in an antecedent position freely.

Those syntactic factors, we find, may interact with the c-command relation to demand a particular anaphoric form.

Through the semantic approach, we have discovered that some anaphoric interpretations are arrived at through the semantic properties of the anaphoric forms themselves, their antecedents. Others are arrived at through the kinds of reference the antecedent nominals are used for.

Specifically, the semantic features "humanness" and "animateness" are discussed to consider which anaphors can be used for reference to referents with such semantic features. Consequently, an implicational hierarchy for the coreference possibility to a human/animate referent for each anaphoric forms is suggested as follows.

+Human +Animate	>	+Human +Animate	>	+Human +Animate
ku kusalam		caki		0 full noun phrase

Secondly, generic and random references are discussed to determine what anaphoric forms should follow the antecedents: the zero-anaphor and a full noun phrase can be used to encode generic and random referents; the other anaphors are generally restricted in use for generic or random reference.

Finally, coreference with indefinite and quantified NPs are also discussed. We have found that only caki can have anaphoric relations with an indefinite antecedent within the sentence boundary, and quantified NPs cannot have anaphoric relations with zero-anaphor, ku, or kusalam within the sentence boundary.

Numerous factors are discussed beyond the sentence boundary from discourse structure to cognitive factors. A discourse structure consisting of three levels, the clause, the sentence (peak/non-peak), and the paragraph, is proposed. Accordingly, it is found that the more explicit an anaphoric form is, the better chance it stands to occur in peak sentences. When styles are considered, the pronoun ku is restricted to written discourse and to neutral style as opposed to spoken discourse and honorific style, respectively.

Two cognitive factors, avoidance of ambiguity and the speaker's point of view, are examined. It is found that the higher the degree of interference between two mentions of anaphora is, the more explicit anaphoric form is used to avoid ambiguity. From his point of view, the speaker uses a less explicit anaphoric form for the participant for whom the speaker has greater empathy. Korean speakers specifically use caki for this effect.

In addition, "topic continuity" is discussed with regard to the anaphoric forms to see how the latter enhance discourse

Handwritten list of numbers: 1, 2, 3, 4, 5, 6, 7, 8, 9, 10, 11, 12, 13, 14, 15, 16, 17, 18, 19, 20, 21, 22, 23, 24, 25, 26, 27, 28, 29, 30, 31, 32, 33, 34, 35, 36, 37, 38, 39, 40, 41, 42, 43, 44, 45, 46, 47, 48, 49, 50, 51, 52, 53, 54, 55, 56, 57, 58, 59, 60, 61, 62, 63, 64, 65, 66, 67, 68, 69, 70, 71, 72, 73, 74, 75, 76, 77, 78, 79, 80, 81, 82, 83, 84, 85, 86, 87, 88, 89, 90, 91, 92, 93, 94, 95, 96, 97, 98, 99, 100.

we
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wo
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yo
ii

APPENDIX B
RECODINGS OF CONVERSATIONS

RECORDING I: Recorded on November 11, 1987

A: Cip-ey onun kil-ey kyothongsako-ka nattula.
house LO coming road LO traffic accident SU happen

Kkumccikhatentey. Thulek-i cacenke-lul cengthongulo
terrible truck SU bicycle DO directly

pakasse.
clashed

'There was a traffic accident on my way home. It was
terrible. A truck clashed against a bike directly.'

B: Kulay? Ø_i cwukesse?
Is it died

'Was it? Is (he_i) killed?'

A: Ung. Kulen ket kathay. Kulen ken an ponunkey
yes such thing likely such thing not see

cokhettula.
good

'Yeah. It looked likely. I would rather not to see
it.'

B: Ø_i ettekhey cwuketnuntey?
how died

'How was (he_i) killed?'

A: Thulek-i cacenke-lul pakassuni ettekhey toytkesye?
truck SU bicycle DO clash how become

Ø_i ku cali-eyse kassulkeya. Kil-ey Ø_i tephe
the place LO pass away road LO cover

nwatnuntey phi-ka sapangey koyngcanghay.
 put blood SU around great

'(Guess) how did it happen, when a truck clashed
 against a bike? (He_i) seemed to be killed
 immediately. (He_i) was covered on the road, blood
 was all around the place.'

B: Seysaney, Ø_i antoyssela. Kulem, ce ... kusalam_j-un
 world pity then the man TO

ettekhey toyesse?
 how become

'Gosch, (I) pity (him_i). Then what about the man?'

A: Nwukwu? Thulek wuncenswu malya_j? Kusalam_j-un
 who truck driver mean the man TO

melccenghatentey. Hayethen, Wuli-to phalkithong
 perfect anyway we SP 8 cylinder

cha saki-lul cal haytci. Ccokkuman cha thako tanita
 car buying DO good did tiny car ride go

patchimyen kucalieyse kanun keya.
 clash right away go thing

'Who? (Do you mean) the truck drive_j? He_j was
 perfect (was not injured at all). Anyway, it is good
 for us to have bought a 8 cylinder car. If a tiny car
 is clashed (by a truck), (the driver) will pass away
 right away.'

B: Cwunun key mwue wuli maum-taylo toynun kenka?
 die thing what our mind SP become thing

'(Do you think) we can control our life?'

RECORDING II: Recorded on September 30, 1989
(From a TV drama)

A: Wusul ttay-ka aniyeyyo Cangpi-ssi,
laugh time SU not Mr. Cangpi

'It is not time for laughing, Mr. Cangpi.'

Cangpi: Ce .. Pwucangnim.
well supervisor

'Well ... Mr. Supervisor.'

B: Ney, ce .. Cangpi-ssi,-nun chinkwupwun,-i olaynmaney
yes well Mr. Cangpi TO friend SU since long

kwikwukhayse ...
returning home

'Yes .. a friend of Mr. Cangpi, has come back (to
Korea) since long time

A: Kulayto, ttay-ka ttay-in mankhum ilhal ttay-nun il
but time SU time SU that much working time TO work
-ul hayyacyo.
DO do

'However, whenever working is necessary, (you) have
to work.'

Cangpi: Yemlye maseyyo. Cey-ka mathun il-ul pam-ul
worry not I SU change work DO night DO

saywueselato kkutnay noultheynikkayo.
not sleep finish put

'Do not worry. I will finish the work I am in charge
of by working over night.'

D: Ce .. Cangpi-senpaynim, chinkwupwun,-iyo, yumyenghan
well Mr. Cangpi friend SU famous

uysa-layyo. Cinanpen &, sinmwun-eyto natcanayo.
doctor be the other day newspaper LO appear

Mikwuk-eyse kupwun,-i hakswultayhoy chamsekcha kwikwuk
america LO the man SU conference attendance return

hayttakoyo.
did

'Well, the friend_i of Mr. Cangpi_i is a famous doctor. (He_j) has appeared on a newspaper several days ago. He_j has come back (to Korea) from America to attend a medical conference.'

A: Ani .. ku sinmwun-ey nan key wuli-hako mwusun
then that newspaper LO appear thing we with what
sangkwon-i issumnikka?
relation SU be

'Then, does the appearance on the newspaper have something to do with us?'

D: Ani .. kulayto Cangpi-senpaynim_i-un ...
no but Mr. Cangpi

'No... but, (at least) with Mr. Cangpi_i ..'

B: Ø_i kulekhey chwulseyhan chinkwupwun_j-ul mannasimyen
 such successful friend DO meet

Ø_i kaltung sayngkisikeytciyo.
 conflict arise

'(I think), when (Mr. Cangpi_i) meets such a successful friend_j, a conflict may arise (in him_i)

A: Mwusun kaltung-i sayngkyeyo?
what conflict SU arise

'What kind of conflict?'

B: Chinkwupwun_j-un kulekhey cal toysyetnuntey Cangpi-
friend SU such good become Mr.

ssi_i-nun ...
Cangpi TO

'The friend_j has succeeded so good, but (what about) Mr. Cangpi ..'

A: Ani ... Cangpi-ssi_i-ka ettayse kulemnikka? Cangpi-
then Mr. Cangpi SU how do Mr.

ssi_i-nun wuli hoysa-uy inceng patnun ellittu-lose,
Ø_i
Cangpi TO our company GE recognition get SP

kot tayli-ka toysil pwun-ilakoyo.
soonn manager SU become person be

'Then, what about Mr. Cangpi? Mr. Cangpi, has been receiving a good reputation in our company, (he,) will be a manager soon.'

Cangpi: Na onul oycey cha thatta.
I today imported car ride

'I have ridden a (luxurious) imported car today.'

D: Cengmaliyeyyo?
true

'Really?'

Cangpi: Anin key anila tallinun ungcepsilitula.
not thing not running livingroom

'It was a real running livingroom.'

B: Ani, kulem cha-kkaci mikwuk-eyse kacyeon keyeyo,
then car SP america LO take thing

kupwun_j-i?
the man SU

'Then, (do you mean) did the man_j has brought a car from America?'

Cangpi: Ani, kuchinkwu_j-ka kucha-ey napchi-lul tanghan
no the friend SU the car LO kidnap DO become

keyeyo.
thing

'No, the friend_j was kidnapped by the car.'

D: Napchi-laniyo?
kidnap be

'(What do you mean) by kidnapped?'

Cangpi: Wuen kwipwui_k-hanthey. Ø_k sinmwun-ey
uncertain rich lady SP newspaperLO

kuchinkwu_j kisa-lul pokwuse, Ø_k cenhwalo myetpenina
the friend article DO saw telephone several times

Ø_j wangcin yocheng-ul hayttaynun keya. Kulentay, Ø_j
home visit ask DO did thing but

wankanghi kecelul hayssetay.
strongly refuse did

'By a rich-looking lady. (She_k) has read the article about him_j on a newspaper, (she_k) has been asking (him_j) for a home visit (to examine a patient). But, (he_j) has refused it strongly.'

D: Kuyeca_k com eti-ka isanghanket aniyeyyo? Wuli
the woman little whereSU weird not our

-nala eyto yumenghan uysatul-to mani itnuntey malyeyo.
country LO famous doctors SP many present mean

'Isn't the woman_k weird? There are many famous doctors in our country, too.'

B: Ney, kulekeyyo.
yes true

'Yes, that is true.'

Cangpi: Cwawucikan, Ø_j hotheyl-eyse na-hakwu ancasa
bu the way hotel LO O with sitting

iyaki-lul hakwu itnuntey, kuyecatul-i taleytule Ø_j
talking DO do be the women SU attack

pankangceylo mak kkulkwu kanuntey, ya forcibly
pull go

motmallikeyttula.
can't help

'By the way, when (he_j) was talking with me sitting in the hotel (lobby), the women_k has attacked (him_j) and forced (him_j) to go, (I) could not help.'

D: Kulenikka Cangpi-senpaynim_i-un pheynsung-ul hay kaciko

Then Mr. Cangpi SU ride DO do take

wuli hoysa-kkaci osyetta i iyakiyeyyo?
our company to come this story

'So, you (Mr. Cangpi) mean you took a ride (with them) to come to our company?'

Cangpi: (Cemhwaey)Mwe kkoma cinchalhay cwukwu elma-lul
(to the phone) what kid examine give how much DO

patattakwu? paykman-won?
receive million won

'(To the phone)what? How much (did you) get for examining a kid? One million won?

E: Wangcin hanpen-ey paykman-won-imyen mwo-ka
home visit once LO million won what SU

calmottoynkey anya?
wrong not

'Isn't something wrong about paying one million won for one home visit (for a doctor's fee)?'

D: Ton manun salamtul-un kulel swu ittaynikkayo.
money much people TO that able be

'Some rich people are able to (pay such high fee).'

E: Kulayto nemwu haytnuntey.
But too much did

Nevertheless, too much (money was paid).

A: Cangpi, chinkwu,-ka mikwuk-eyse-to yumeynghan takthe-

friend SU America LO SP famous doctor

nikka Ø_k Ø_j thukpeyl taywu-lul hay cwunkekeytci.
be special treatment DO do give

'Since Cangpi,'s friend_j is a famous doctor even in America, (I guess She_k) treated (him_j) specially.'

Cangpi: A kulem, hayethun wuli-ka kosaynghantako hanthek
so anyway we SU suffering treat

ul naykeyttayo wuli chinkwuka_j.
DO give our friend

'That is right. Anyway my friend_j wants to treat us to (a dinner), because we are working hard.'

coherence. Zero-anaphor tends to occur whenever topic continuity exists without any semantic break; ku is often used when a topic continues but some semantic break appears; kusalam and the pronoun ku with the topic marker nun are used when topic switches; and a full NP tends to be used to introduce a new referent or reintroduce an old one in a discourse. In a discourse of moderate length, the full NP may not appear at the beginning of each paragraph boundary, because the theme of the whole text is clear enough. Instead, ku may appear at such points.

From this investigation, we conclude that the anaphoric systems and interpretations in Korean are not possible to describe in autonomous syntax. The examination of factors in semantics, discourse and beyond in this study gives a better understanding of how each of the whole set of anaphors appears in real language situations in Korean. This thus strongly supports the need for the study of interactions between syntax, semantics, and discourse.

APPENDIX A
ROMANIZATION OF KOREAN: YALE SYSTEM

The following table shows how the Yale System represent Hankul
(Korean Writing System) symbols and their phonetic value.

Hankul	Yale System	Phonetic Value
ㅍ	p	p/b
ㅑ	ph	ph
ㅓ	pp	p'
ㅕ	t	t/d
ㅗ	th	th
ㅛ	tt	t'
ㅜ	s	s/sh
ㅠ	ss	s'
ㅛ	c	j
ㅜ	ch	c
ㅝ	cc	c'
ㅞ	k	k/g
ㅟ	kh	kh
ㅠ	kk	k'
ㅚ	m	m
ㅜ	n	n
ㅇ	-ng	-ŋ
ㄹ	l	l/r
ㅎ	h	h
ㅣ	i	i
ㅑ	wi	wi
ㅓ	ey	e
ㅕ	yey	ye
ㅗ	wey	we
ㅛ	oy	oe
ㅜ	ay	ae
ㅠ	way	wae
ㅡ	u	u
ㅑ	e	o
ㅓ	ye	yo

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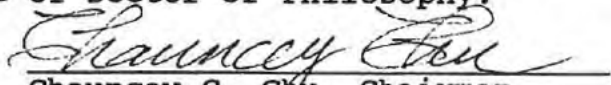
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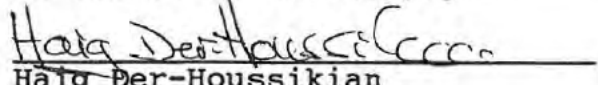
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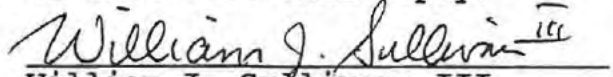
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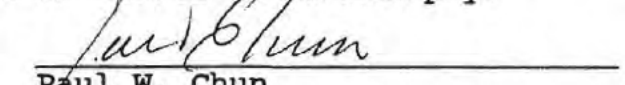
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